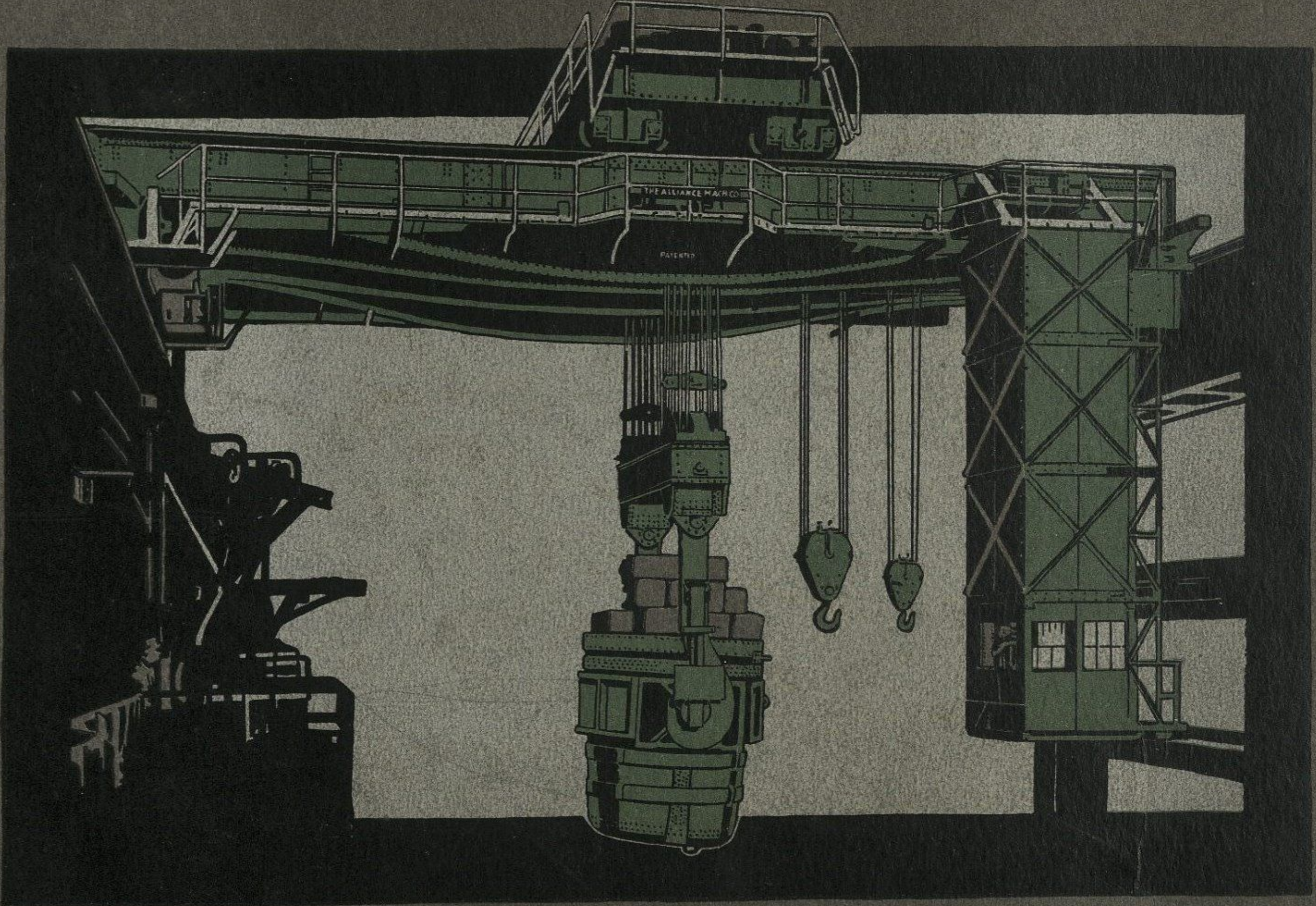
THE ALLIANCE MACHINE CO.

ALLIANCE, O.


THE ALLIANCE MACH. CO.
PATENTED

TEST LOAD 400,500 Lbs.

Heise

ALBERT L. STRUVEN,
BALTIMORE,
MARYLAND.

THE ALLIANCE MACHINE COMPANY

THE LARGEST MANUFACTURERS OF THE WORLD'S LARGEST CRANES

Electric Ladle Cranes
Electric Strippers
Electric Grab Bucket Cranes
Electric Jib Cranes, Tower and
  Wall Traveling
Electric Standard Traveling Cranes
Electric Coke Pushers and Levelers

Electric Charging and Drawing Cranes
Electric Soaking Pit Cranes
Electric Gantry Cranes
Electric Ore Bridges
Electric Monorail Hoists
Steam Drop Hammers
Shears for Bars and Shapes

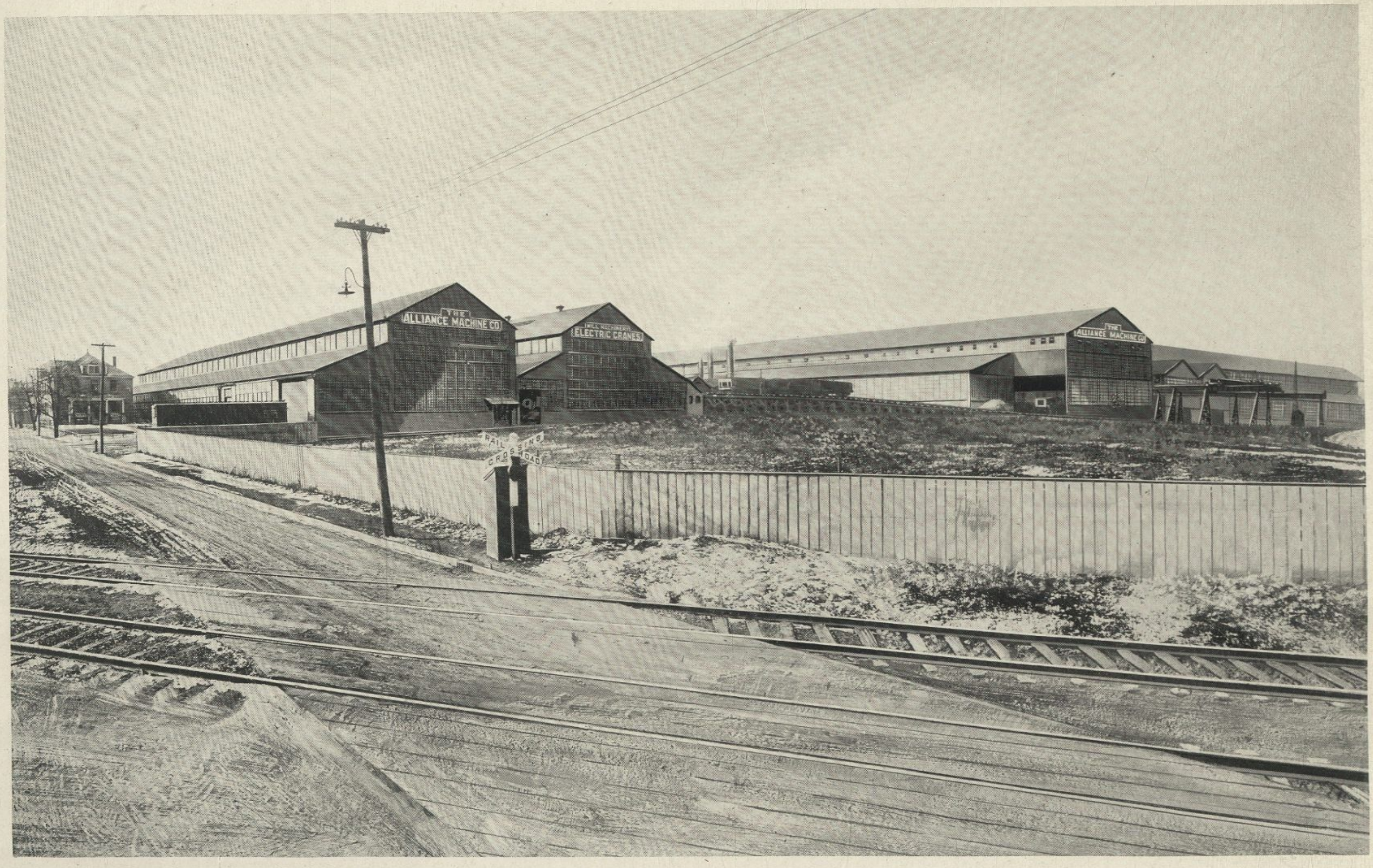
Special Work

Rolling Mill and Hydraulic Machinery
Copper Converting Machinery
Charging Larries and Scale Cars

Main Office and Works
ALLIANCE, OHIO, U. S. A.

PITTSBURG, PA.

BIRMINGHAM, ALA.


THE ALLIANCE MACHINE CO.
MILL MACHINERY ELECTRIC CRANES
THE ALLIANCE MACHINE CO.
RAILROAD CROSSING

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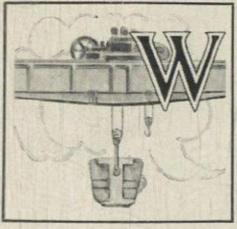
Pronouncement



WE present our 1916 Edition Catalog with a pardonable degree of pride, because in it we are able to show greater achievements than have been accomplished by any other builders of similar equipment in this country. The alphabetic and classified list of users of our equipment, together with such few illustrations as we have been able to get by actual photographs, are material testimony to the fact that we are meeting the exacting demands of the prominent industries in this country and abroad.

Our only reference in this Edition to specifications is to mention that one of the largest users of our Cranes, in placing a recent order with us for 69 more, ranging up to 175 tons capacity, write us:

> **"These Cranes are not to be built to our new specifications, as it has been decided that Cranes of the same general description as furnished us in the past will be satisfactory for our present needs."**

The quality of a manufacturer's product is, after all is said, the only test, and we attribute our success to the essentials of pre-eminence in design, mechanical leadership, high grade workmanship and a well-balanced business administration, coupled with a tendency to give more, rather than less, value expected by our customers.

Our long experience in doing the big and unusual things, not possible in other establishments, is being reflected in a demand, which, as we go to press, makes necessary building and equipment improvements to double our capacity, and we will be even better fitted than in the past for engineering, developing and manufacturing special equipment, and we solicit your problems.

THE ALLIANCE MACHINE COMPANY.

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Alphabetical List of Users
of
Two or More Alliance Machine Company's Cranes

		TOTAL
Algoma Steel Co.		3
Alliance Machine Co.		11
Alliance Structural Co.		5
Alton Steel Hoop Co. (See Laclede Steel Co.)		
Aluminum Co. of America Total, as follows		23
Knoxville, Tenn.	2	
Marysville, Tenn.	4	
Massena Springs, N. Y.	10	
Whitney, N. C.	7	
American Bridge Co.		4
American Cast Iron Pipe & Foundry Co.		2
American Rolling Mill Co.		2
American Sheet & Tin Plate Co. Total, as follows		18
Gary, Ind.	12	
Martins Ferry, Ohio	1	
McKeesport, Pa.	1	
Mercer, Pa.	2	
Monessen, Pa.	1	
New Castle, Pa.	1	
American Spiral Pipe Works		2
American Steel Foundries Co.		16
American Steel & Wire Co. Total, as follows		35
Allentown, Pa.	1	
Cleveland, Ohio	19	
Donora, Pa.	7	
Trenton, N. J.	1	
Waukegan, Ill.	1	
Worcester, Mass.	6	
American Vanadium Co.		2
Andrews Steel Co.		6
Appalachian Power Co.		3
Ashland Iron & Mining Co.		6
Atlanta Steel Hoop Co.		2
Benson Bros., Ltd., Sydney, Australia		2
Berger Manufacturing Co.		2
Bethlehem Steel Co. Total, as follows		123
Lehigh Plant	105	
Saucon	18	
Brazilian Railway Co.		2

		TOTAL
Brill Co., J. G.		3
Broken Hill Proprietary Co., Australia		10
Buckeye Engine Co.		3
Burger Iron Co.		2
Cambria Steel Co.		65
Camden Iron Works		7
Canada Forge Co.		3
Canada Foundry Co.		6
Canadian Pacific Railway Co.		5
Canton Steel Foundry Co.		2
Canton Sheet Steel Co.		3
Carnegie Steel Co. Total, as follows		204
Carrie Furnaces	3	
Clairton Works	22	
Columbus Works	1	
Donora Works	10	
Duquesne Works	31	
Edgar Thomson Works	27	
Homestead Works	50	
McCutcheon Mills	1	
Mingo Works	4	
New Castle Works	6	
North Sharon Works	1	
Ohio Works	12	
Schoen Works	7	
South Sharon Works	9	
Union Railroad Co.	1	
Upper Union Mills	1	
Waverly Works	18	
Central Iron & Steel Co.		10
Central Steel Co. (See Massillon Rolling Mill Co.)		
Central Tube Co.		4
Cerro de Pasco Mining Co., Brazil, S. A.		14
Chattanooga Steel Co.		2
Cincinnati Planer Co.		2
Cleveland Frog & Crossing Co.		8
Colorado Fuel & Iron Co.		16
Columbia Chemical Co.		3
Cramp & Sons, Wm., Ship and Engine Building Co.		3
Crucible Steel Co. of America (Atha Works)		3

		Total
Delaware, Lackawanna & Western Railroad Co.		2
Dominion Iron & Steel Co.		6
Eastern Steel Co.		23
Electric Development Co.		3
Erie City Iron Works Co.		3
Erie Forge Co.		7
Farrel Foundry & Machine Co.		3
Firth Sterling Steel Co.		5
Florence Iron Works Co.		6
Follansbee Bros. Co.		4
Ford City Foundry & Machine Co.		2
Fore River Ship Building Co.		5
Gary Screw & Bolt Co.		7
General Electric Co. Total, as follows		28
Canada	5	
Erie	10	
Schenectady	8	
West Lynn	5	
Goldens Foundry Co.		2
Goulds Mfg. Co.		2
Great Northern Power Co.		2
Gulf States Steel Co.		6
Harlan & Hollingsworth Co.		5
Heppenstall Forge & Knife Co.		4
Hydraulic Engineering Co. of Maine, Keokuk, Iowa		3
Illinois Steel Co. Total, as follows		51
Joliet Works	4	
South Chicago	47	
Imperial Steel Works, Japan		1
Indiana Steel Co.		232
Inland Steel Co.		36
Jones & Laughlin Steel Co. Total, as follows		41
Aliquippa Works	31	
Eliza Furnaces	2	
Soho Furnaces	1	
South Side	7	
Kokomo Steel & Wire Co.		5
La Belle Iron Works		20
Laclede Steel Co.		2
Lorain Steel Co.		20
Lukens Iron & Steel Co.		6
Mahoning Foundry Co.		2
Mansfield Sheet & Tin Plate Co.		3
Maryland Steel Co.		27
Massillon Bridge & Structural Co.		10
Massillon Rolling Mill Co.		13
Mesta Machine Co.		7
Midvale Steel Co.		7
National Malleable Castings Co.		2
National Roll & Foundry Co.		2
National Stamping & Enameling Co.		4
National Steel Co.		2
National Transit Co.		6
National Tube Co. Total, as follows		82
Christy Parks Works	1	
Elwood City Works	9	
Lorain Works	56	
McKeesport Works	12	
Pittsburg Works	3	
Wheeling Works	1	
New Castle Forge & Bolt Co.		3
Newport Rolling Mill Co.		7
New York State Steel Co.		10
Ohio Seamless Tube Co.		5
Ohio Steel Foundry Co.		5
Otis Steel Co.		13
Passaic Steel Co.		3
Pennsylvania Bridge Co.		3
Pennsylvania Steel Co.		35
Petroleum Iron Works		6
Pickands, Mather Co. (See United Furnace Co.)		
Pittsburg Crucible Steel Co.		8
Pittsburg Plate Glass Co. Total, as follows		17
Crystal City	5	
Ford City Works	12	
Pittsburg Steel Co.		62
Pittsburg Valve Foundry & Construction Co.		4
Portsmouth Steel Co. Total, as follows		15
Portsmouth Works	14	
Wheeling Works	1	
Raritan Copper Co.		2
Republic Iron & Steel Co. Total, as follows		21
Moline Works	1	
Thomas Works	2	
Youngstown Works	18	
Republic Rubber Co.		3
Rust Boiler Works		3
Sheffield Cast Iron Pipe & Foundry Co.		12
Scullin & Gallagher Iron & Steel Co.		8
Seamless Tube Co.		7
Sharon Fdy. Co.		4

		Total
Sharon Steel Hoop Co.		6
Simonds Manufacturing Co.		4
Standard Steel Works		12
Swift & Co.		2
Tata Iron & Steel Co. (India)		2
Tennessee Coal, Iron & Railroad Co.		36
Treadwell Co., M. H., Inc.		8
Tremont Nail Co.		2
Union R. R. Co.		3
Union Steel Co.		9
United Engineering & Foundry Co. Total, as follows		8
Canton	1	
Pittsburg	2	
Vandergrift	2	
Youngstown	3	
United Furnace Co.		2

	Total
United Steel Co.	20
Universal Portland Cement Co.	5
Upson Nut Co.	3
Verona Steel Casting Co.	3
Washington Steel & Ordnance Co.	3
Westinghouse Electric & Mfg. Co.	23
West Leechburg Steel Co.	3
Wheeling Corrugating Co.	8
Wheeling Mould & Foundry Co.	8
Whitaker-Glessner Co.	3
Wickwire Steel Co.	7
Wisconsin Steel Co.	11
Wood, Alan, Iron & Steel Co.	2
Woodward Iron Co.	4
Worth Bros. Co.	52
Youngstown Sheet & Tube Co.	21

List of Users of Alliance Machine Co.'s Cranes

Classified as to Types

Patented Four-Girder Ladle Cranes

	Tons Capacity	
American Steel & Wire Co.	2	115
Andrews Steel Co.	1	125
Ashland Iron & Mining Co.	1	125
Bethlehem Steel Co.	1	125
	4	100
	2	75
	4	60
Broken Hill Proprietary Co.	2	100
	1	75
	1	60
Cambria Steel Co.	4	150
	1	50
	1	30
Carnegie Steel Co.—Clairton Works	1	75
Duquesne Works	5	125
Duquesne Works	6	75
Edgar Thomson Works	3	175
Edgar Thomson Works	3	75
New Castle Works	1	75
Sharon Works	1	75
Sharon Works	2	45
Chattanooga Steel Co.	1	125
Colorado Fuel & Iron Co.	1	75
Dominion Iron & Steel Co.	2	40
Eastern Steel Co.	1	125
Follansbee Bros. Co.	1	40
Gulf States Steel Co.	1	100

	Tons Capacity	
Illinois Steel Co.	2	175
	6	100
	1	60
Indiana Steel Co.	2	175
	3	150
	6	125
	3	100
	11	75
Inland Steel Co.	1	100
International Nickel Co.	1	25
Jones & Laughlin Steel Co.	3	150
	1	125
	2	75
	6	50
Kokomo Steel & Wire Co.	1	125
La Belle Iron Works	2	40
Massillon Rolling Mill Co.	1	100
National Enameling & Stamping Co.	1	80
National Malleable Castings Co.	1	50
National Tube Co.	3	125
	4	75
New York State Steel Co.	1	75
	1	40
Pennsylvania Steel Co.	1	150
	1	75

Ladle Cranes—*continued*

		Tons Capacity
Pittsburg Crucible Steel Co.	2	150
	1	75
Pittsburg Steel Co.	3	125
	2	80
	1	25
Republic Iron & Steel Co.	3	125
	3	75
Tata Iron & Steel Co. (India)	1	100
Tennessee Coal, Iron & R. R. Co.	5	100
	4	45
United Steel Co.	2	100
	1	60
West Leechburg Steel Co.	1	40
Wickwire Steel Co.	1	100
Worth Bros. Co.	1	80
	1	50
Youngstown Sheet & Tube Co.	3	80

Strippers—Rope and Screw Type

Ashland Iron & Mining Co. (Rope Type)	1	125
Bethlehem Steel Co. (Rope Type)	1	200
Broken Hill Proprietary Co. (Rope Type)	1	150
Cambria Steel Co. (Rope Type)	3	150
Carnegie Steel Co., Homestead (Rope Type)	1	200
Forged Steel Wheel Co. (Rope Type)	1	100
Gulf States Steel Co. (Rope Type)	1	150
Illinois Steel Co. (Screw Type)	4	150
Indiana Steel Co. (Rope Type)	5	200
Laclede Steel Co.	1	100
Maryland Steel Co., Duplex (Rope Type)	2	100
National Tube Co. (Rope Type)	2	200
Nova Scotia Steel & Coal Co. (Rope Type)	1	150
Pennsylvania Steel Co. (Rope Type)	1	320
Steel Company of Canada (Rope Type)	1	100

Combination Chargers and Strippers

Kokomo Steel & Wire Co.	1
New York State Steel Co.	2
Pittsburg Steel Co.	2
Skinninggrove Iron Co., England	1
Tata Iron & Steel Co. (India)	1
Wisconsin Steel Co.	1

Soaking Pit Cranes

American Steel & Wire Co.	1	7½
Andrews Steel Co.	1	7½
Ashland Iron & Mining Co.	1	5
Bethlehem Steel Co.	2	10
Broken Hill Proprietary Co.	1	5
Cambria Steel Co.	1	20
Carnegie Steel Co. (Homestead Works)	2	10
Eastern Steel Co.	1	10
Indiana Steel Co.	2	25
	1	15
	7	7½
Jones & Laughlin Steel Co.	3	12
Laclede Steel Co.	1	5
Lukens Iron & Steel Co.	1	10
Maryland Steel Co.	1	5
Massillon Rolling Mill Co.	1	5
National Tube Co. (Special)	1	3½
(Bloom Handling)	4	1½
(Bloom Handling)	1	15
Pennsylvania Steel Co.	1	20
Republic Iron & Steel Co.	1	7½
The Steel Company of Canada	1	5
Worth Bros. Co.	5	15

Crane-Type Charging Machines

		Tons Capacity
American Sheet & Tin Plate Co. (Slab)	2	1
(Slab)	1	500 lbs.
Bethlehem Steel Co. (Slab)	1	8
Carnegie Steel Co.—Duquesne (Slab)	1	5
Schoen Steel Wheel Wks. (Open Hearth)	1	2½
Chattanooga Steel Co. (Open Hearth)	1	2½
Dominion Steel Fdy. Co. (Open Hearth)	1	2
Erie Forge Co. (Open Hearth)	1	1
Follansbee Bros. Co. (Open Hearth)	1	2½
Fremont Nail Co. (Open Hearth)	1	1½
Illinois Steel Co. (Slab)	2	5
Indiana Steel Co. (Slab)	4	15
Inland Steel Co. (Open Hearth)	1	3½
(Slab)	1	1
Lorain Steel Co. (Open Hearth)	1	2½
National Tube Co. (Slab)	1	3
New York State Steel Co. (Special)	1	3½
Otis Steel Co. (Slab)	2	5
Pennsylvania Steel Co. (Slab)	1	5
Pittsburg Steel Co. (Bloom)	1	5
Portsmouth Steel Co. (Slab)	1	2
(Slab)	1	1¾
(Slab)	1	1,600 lb.
Pratt & Letchworth (Open Hearth)	1	2½

Floor-Type Charging Machines

American Spiral Pipe Co. (Special)	1	5
Andrews Steel Co. (Open Hearth)	1	5
Ashland Iron & Mining Co.	1	5
Atlas Steel Casting Co.	1	1
Broken Hill Proprietary Co. (Open Hearth)	1	3½
Buckeye Steel Castings Co.	1	4
Eastern Steel Co. (Open Hearth)	1	5
(Bloom)	1	3¾
Firth Sterling Steel Co. (Billet)	1	5
Follansbee Bros. Co. (Billet)	1	1½
Forged Steel Wheel Co. (Special)	1	5
Gulf States Steel Co. (Open Hearth)	1	3½
Illinois Steel Co.	4	7½
Indiana Steel Co.	2	7½
Kokomo Steel & Wire Co. (Open Hearth)	1	5
La Belle Iron Works (Slab)	3	3
Massillon Rolling Mill Co. (Open Hearth)	1	5
Pittsburg Steel Co. (Open Hearth)	3	3½
Raritan Copper Works	2	2½
Republic Iron & Steel Co. (Slab)	1	1
West Leechburg Steel Co. (Billet)	1	1
Worth Bros. Co. (Open Hearth)	2	2½

Manipulators

Heppenstall Forge & Knife Co.	1	3
Standard Steel Works	1	1½

Gantry Cranes

American Sintering Process Co.	1	5
American Smelting & Refining Co.	1	20
Benson Bros., Australia	2	10
Bethlehem Chili Iron Mines Co.	1	40
Broken Hill Proprietary Co., Australia	1	10
Cambria Steel Co.	1	15
	2	10
Canadian Ship Building Co.	1	4
Central Iron & Steel Co.	1	5
Commonwealth Steel Co.	1	10

Gantry Cranes—*continued*

	Tons Capacity	
Cramp & Sons, Wm., Ship & Engine Building Co.	3	10
Delaware, Lackawanna & Western Railroad Co.	2	3½
Eastern Steel Co.	1	15
Fore River Ship Building Corporation Co.	5	10
General Electric Co.	1	40
	1	5
	1	10
	1	20
Illinois Steel Co.	1	25
Inland Steel Co.	1	6
Keystone Coal & Coke Co.	1	10
Lake Shore & Michigan Southern Railway Co.	1	25
Lukens Iron & Steel Co.	4	10
Manila Electric Railroad & Light Co.	1	4

	Tons Capacity	
Maryland Steel Co.	1	5
	1	25
	4	10
Massillon Bridge Co.	2	10
National Enameling & Stamping Co.	2	10
Pennsylvania Steel Co.	2	65
	1	25
	1	15
	1	10
Rogers Brown Iron Co.	1	15
Wickwire Steel Co.	1	10
Wisconsin Steel Co.	1	25
	1	10
Wood, Alan, Iron & Steel Co.	2	10
Worth Bros. Co.	3	10

Bucket Cranes

Cambria Steel Co.	2	5
Carnegie Steel Co.—Edgar Thomson Works	1	10
Homestead Works	4	10
New Castle Works	1	10
New Castle Works	1	8
Central Iron & Steel Co.	1	5
Columbia Chemical Co.	1	5
Illinois Steel Co.	2	10
Indiana Steel Co.	8	5
	2	3
Inland Steel Co.	3	5
Koppers Co., H.	2	5

Maryland Steel Co.	2	5
National Tube Co.	5	10
	1	5
Pittsburg Crucible Steel Co.	2	5
Pittsburg Steel Co.	3	10
Republic Iron & Steel Co.	1	5
Swift & Co.	2	8
Tennessee Coal, Iron & Railroad Co.	1	15
Thomas Furnace Co.	1	5
Universal Portland Cement Co.	2	12½
	1	10
Upson Nut Co.	1	5
Worth Bros. Co.	2	7½

Jib Cranes

Alliance Brass & Bronze Co.	1	5
Alliance Machine Co.	4	3
American Cast Iron Pipe Co.	2	15
Bath Iron Works Co.	1	5
Buckeye Engine Co.	2	10
Cerro de Pasco Mining Co.	1	5
	1	2½
General Electric Co.	1	4
Indiana Steel Co.	4	6

New York State Steel Co.	1	3
Pennsylvania Boiler Works	1	2½
Pittsburg Steel Co.	10	3
Sheffield Cast Iron Pipe & Foundry Co.	4	10
Standard Steel Works Co.	2	10
	1	5
Sterling Steel Foundry Co.	2	1500 lbs.
Tennessee Coal, Iron & Railroad Co.	1	5

Traveling Tower Jib Cranes

		Tons Capacity
Maryland Steel Co.	4	12½

		Tons Capacity
Maryland Steel Co.	2	15

Traveling Wall Jib Cranes

American Locomotive Co.	1	3
Mesta Machine Co.	1	10
	1	5

Pennsylvania Steel Co.	6	10
	3	5
Wheeling Mould & Foundry Co.	2	5

Ore Bridges

Pennsylvania Steel Co.	1	7½
Pittsburg Steel Co.	2	7½

Worth Bros. Co.	1	15

Monorail Traveling Electric Hoists

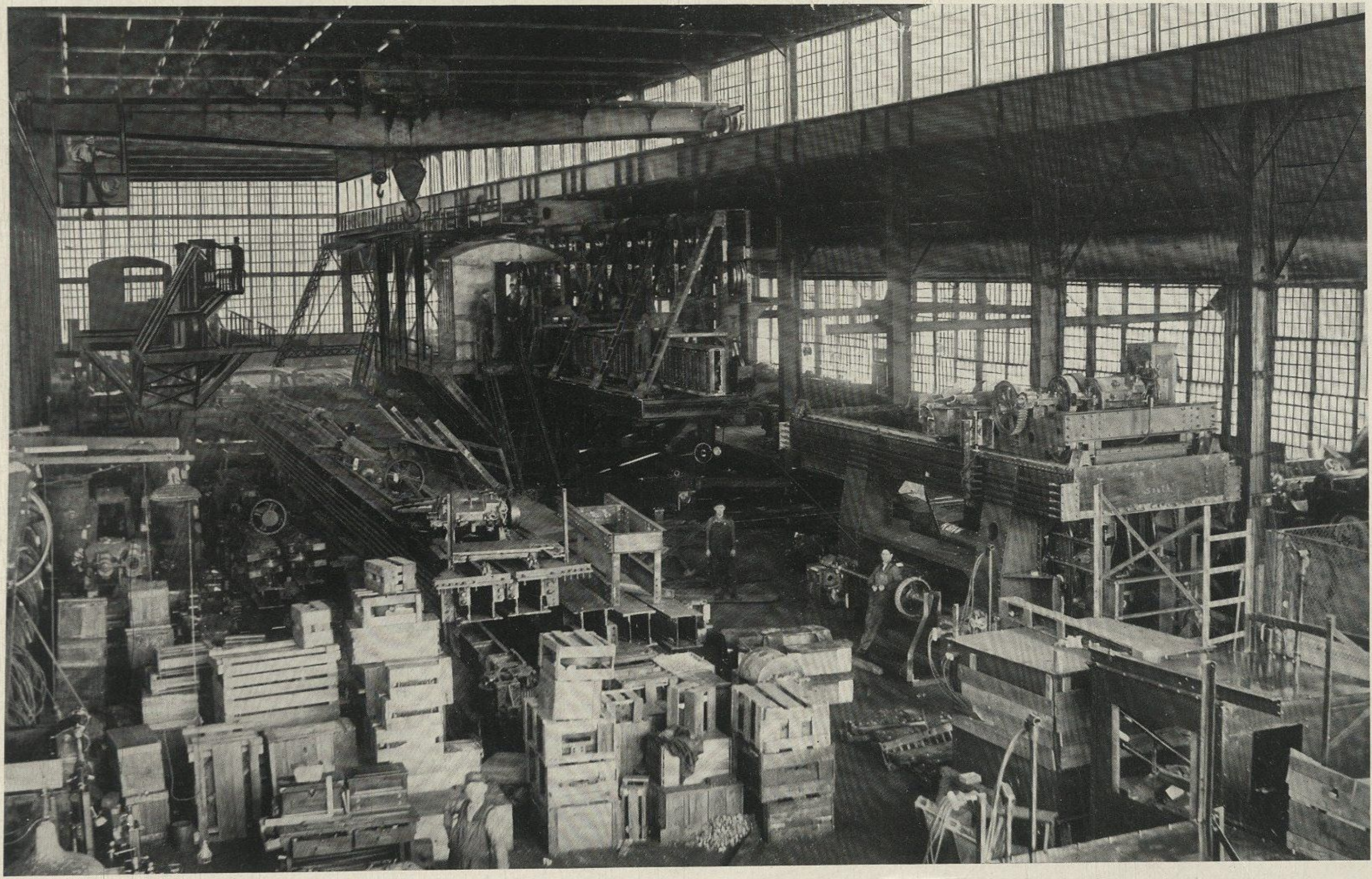
Algoma Steel Co.	1	2
Alliance Structural Co.	4	10
	1	5
American Conduit Co.	1	2
American Rolling Mill Co.	1	3
American Steel & Wire Co.	1	15
	1	6
Atlanta Steel Hoop Co.	2	5
Berger Manufacturing Co.	1	5
Camden Iron Works Co.	1	7½
	1	3
Central Tube Co.	1	3½
Columbia Chemical Co.	1	5
Indiana Steel Co.	2	5
	2	2

Ingram Richardson Co.	1	2
Jones & Laughlin Steel Co.	1	5
Kokomo Steel & Wire Co.	1	3
Newport Rolling Mill Co.	1	5
Penn Bridge Co.	1	5
Pittsburg Steel Co.	1	5
Portsmouth Steel Co.	2	5
Riter Conley Mfg. Co.	1	10
Sheffield Cast Iron Pipe & Foundry Co.	1	5
	4	2
Tennessee Coal, Iron & Railroad Co.	7	5
Union Iron Works Co.	1	2
Western Steel Corporation	1	5
Wheeling Corrugating Co.	1	5

Hand Power Cranes

Alliance Gas & Power Co.	1	15
Bonnot Co.	1	2
Canada Foundry Co.	1	4
Cerro de Pasco Mining Co.	3	20
Indiana Steel Co.	1	5

Massillon Rolling Mill Co.	1	5
Toronto & Niagara Co.	2	40
Toronto Railroad Co.	1	15
Transue Williams Co.	1	10
Woodward Iron Co	1	20
	1	10



A Busy Section of One of Our Erecting Floors

Showing in process of assembling an O. H. Floor Charger, two Coke Pushers, three Gantry Cranes, Ladle Crane, etc.

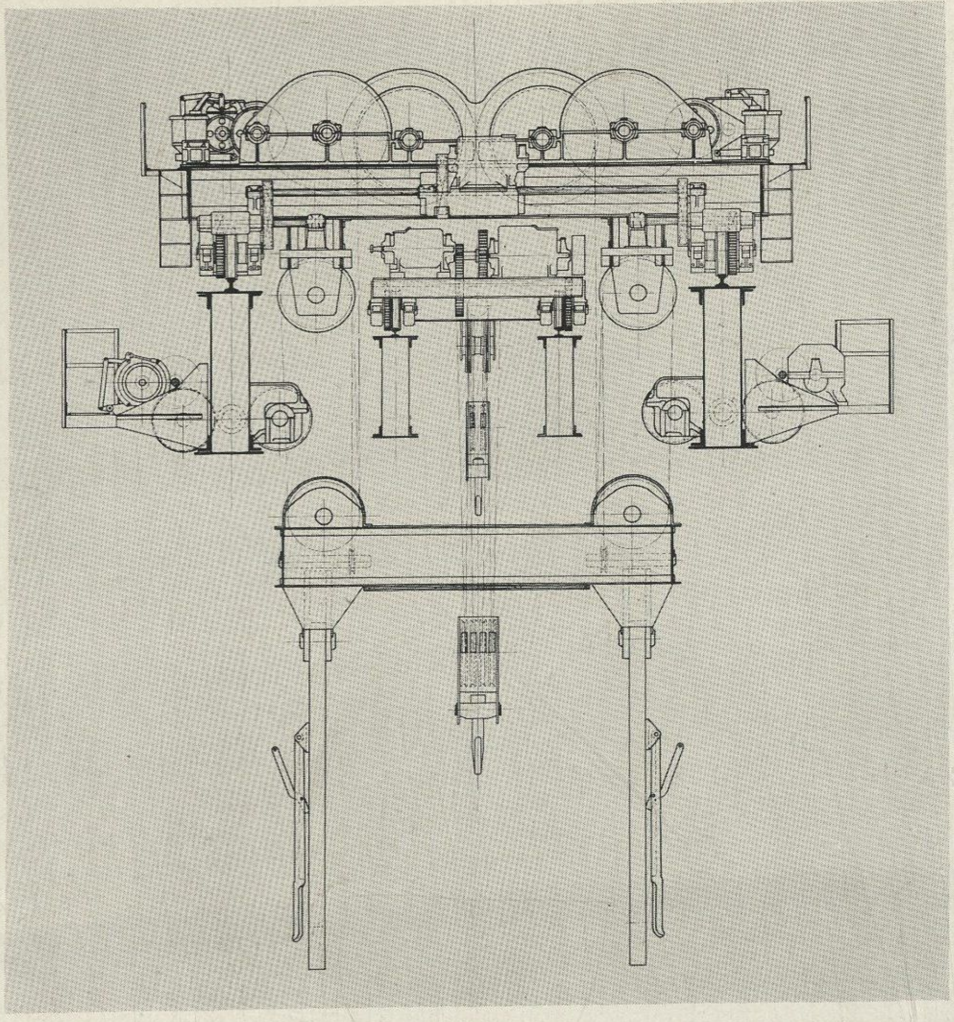
Ladle Cranes

ON the pages immediately following we show a few examples of our Four Girder Double Trolley Electric Traveling Ladle Cranes, all of **which are built under our Adjudicated Patent No. 791,951, and Allowed Patent No. 1,148,323, on Interlocked Drum feature, the validity of our Patent being affirmed by the U. S. District Court of Northern Ohio, also by U. S. Circuit Court of Appeals in the 6th Judicial District, and of this type of cranes we have built upwards of 150 (a list of users of same may be seen on pages 6 and 7).**

Our ladle cranes occupy a conspicuous position among our achievements, not only because many of them are the largest cranes for this work ever built in this country, but also on account of the developments which we have made along the lines of safety, all of which occasion more unanimous commendation by the steel mill people than any other class of mill equipment.

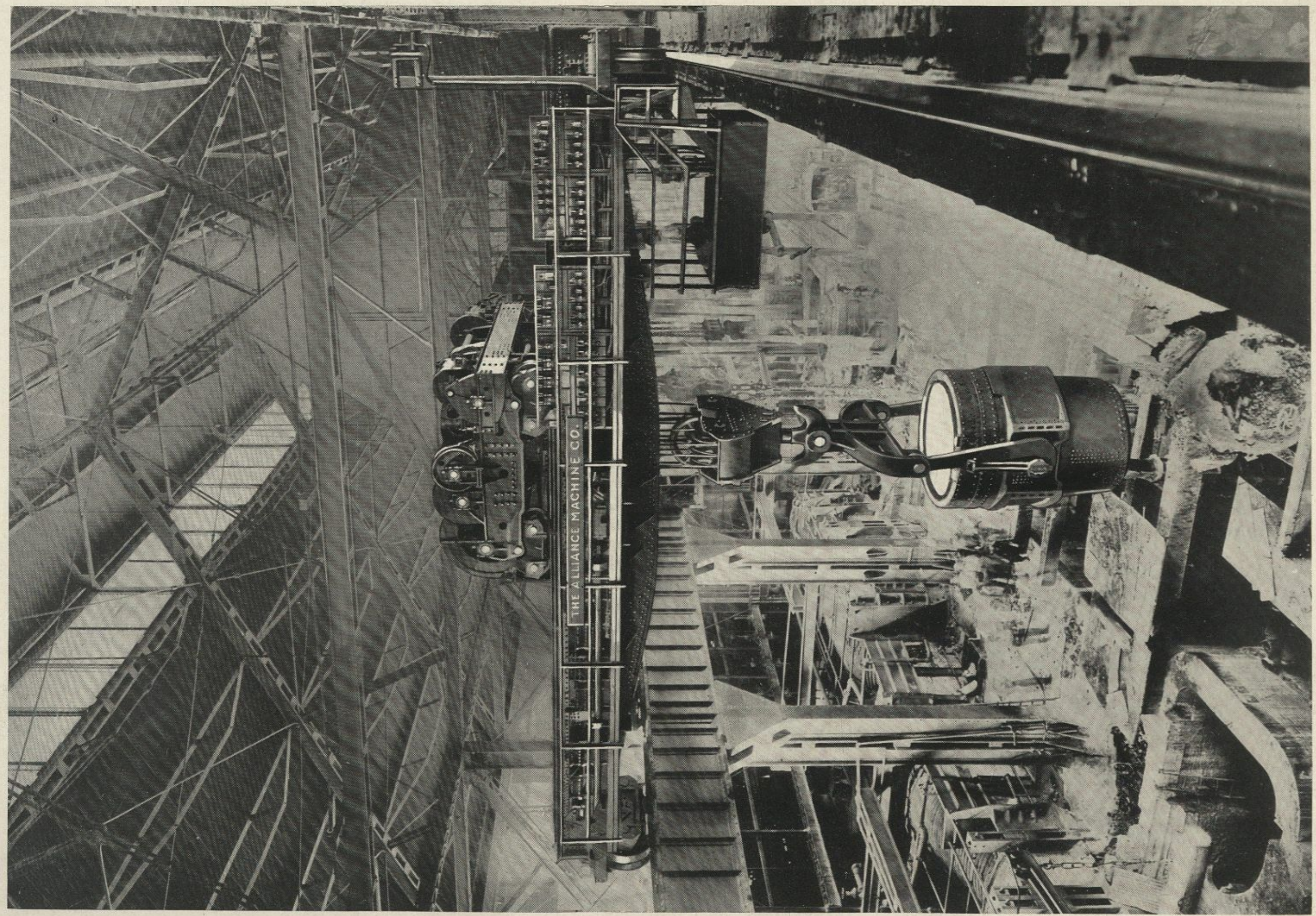
The success of our design has lent inspiration for imitation, but what we build into the design and how it is put there has not even been attempted by others.

From the cross section picture on the opposite page you will be able to get at a glance not only the general construction of these cranes, but also see some of the patented features of interlocked gears and two motors placed over the track wheels, each drum with its own gearing, motor and brake, also the safety ropes which are frequently employed on the larger capacities.



Cross Section Patented Four-Girder Double Trolley Ladle Crane with Interlocked Drums and Safety Ropes

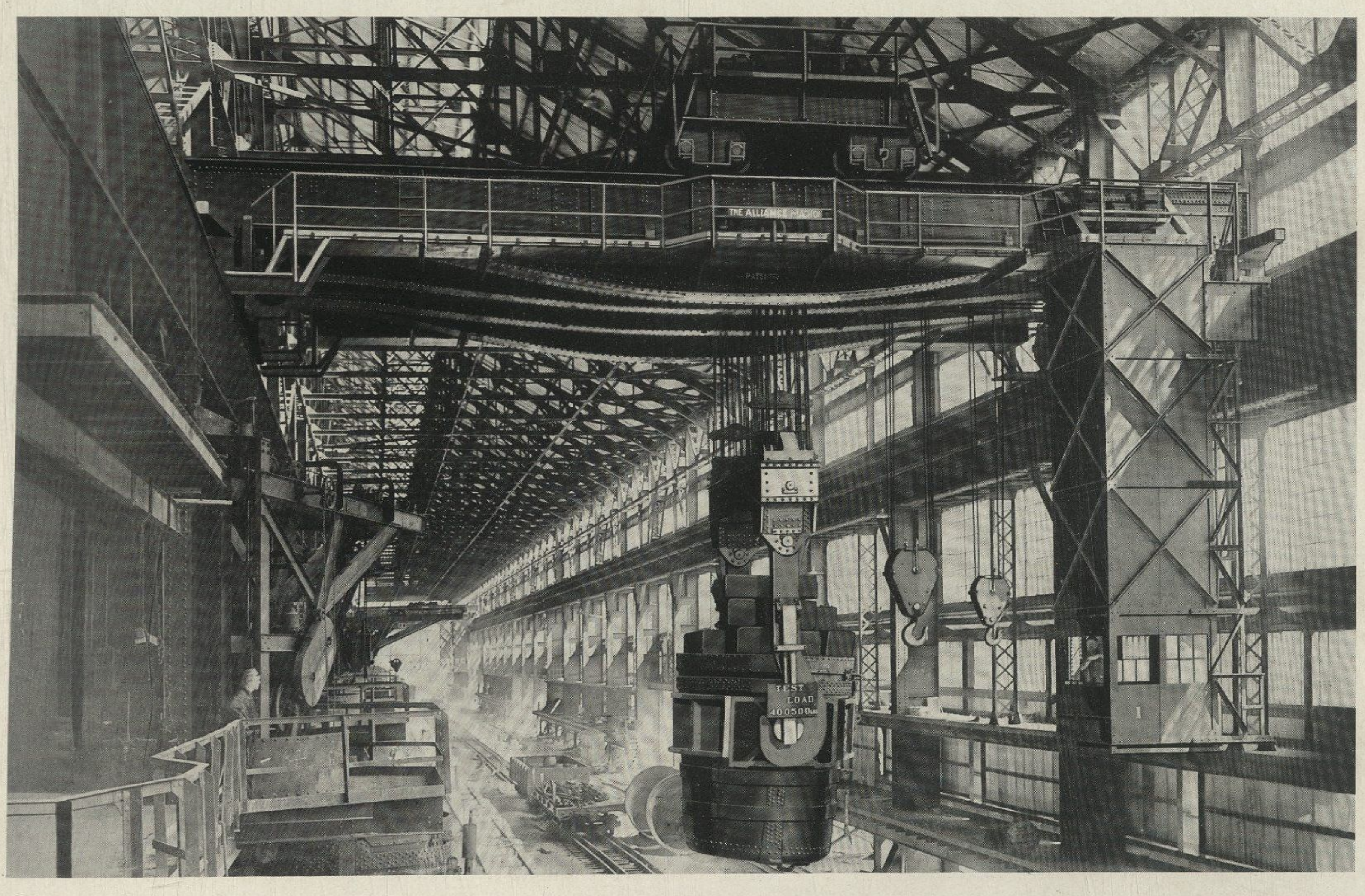
(See Page 12)



The Largest Capacity Single Trolley Ladle Service Crane in Use in this Country

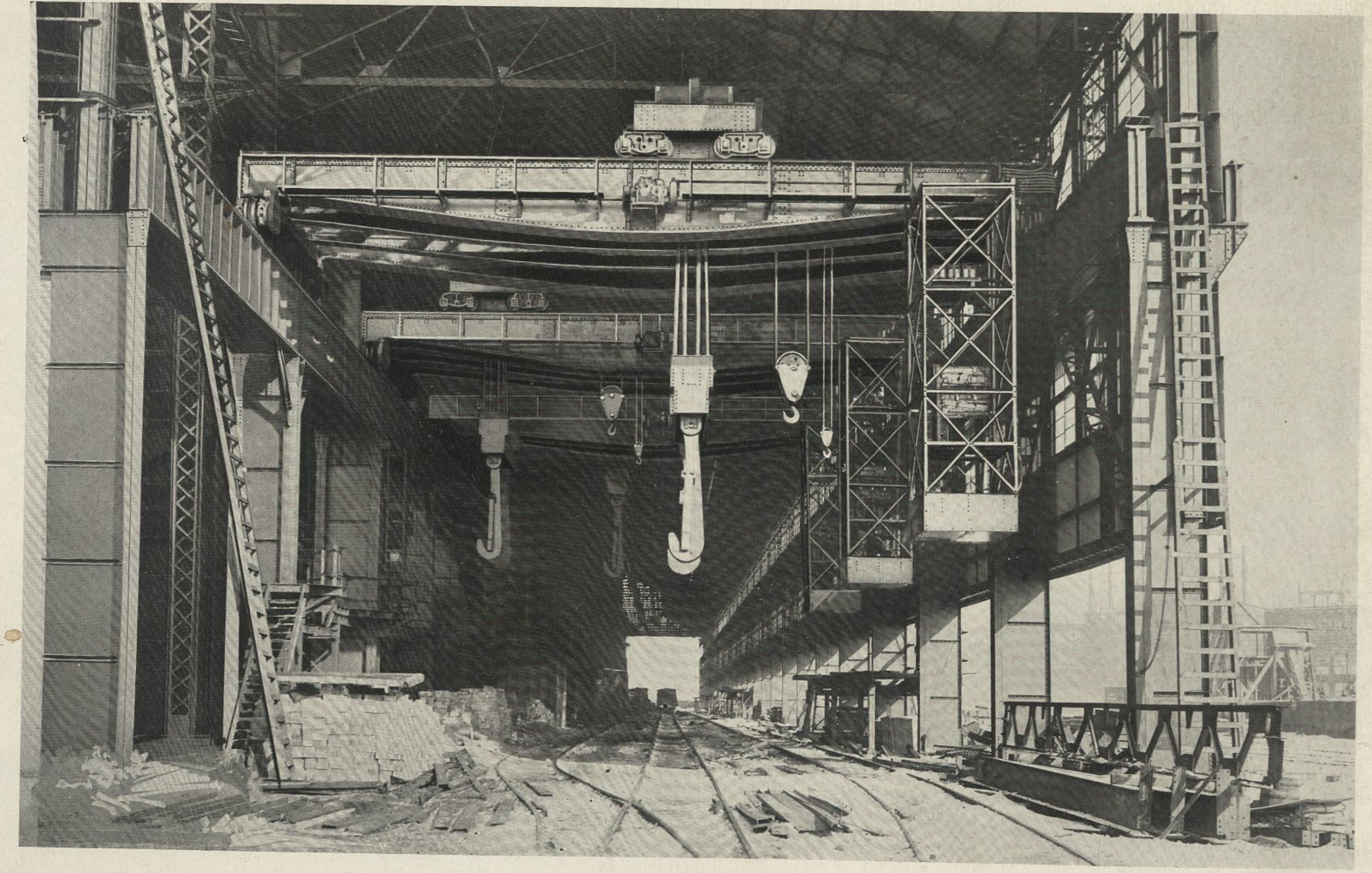
200 tons, 50-foot span, 54-foot lift, with 25-ton Auxiliary Hoist

Installed in the Homestead Plant, Carnegie Steel Co.



One Hundred and Seventy-Five-Ton, Eight-Motor Type, Patented Four-Girder Double Trolley Ladle Crane
58-Foot 9-Inch Span, 30-Foot Lift, 40-Ton Auxiliary Trolley Equipped with 15-Ton Auxiliary Hoist

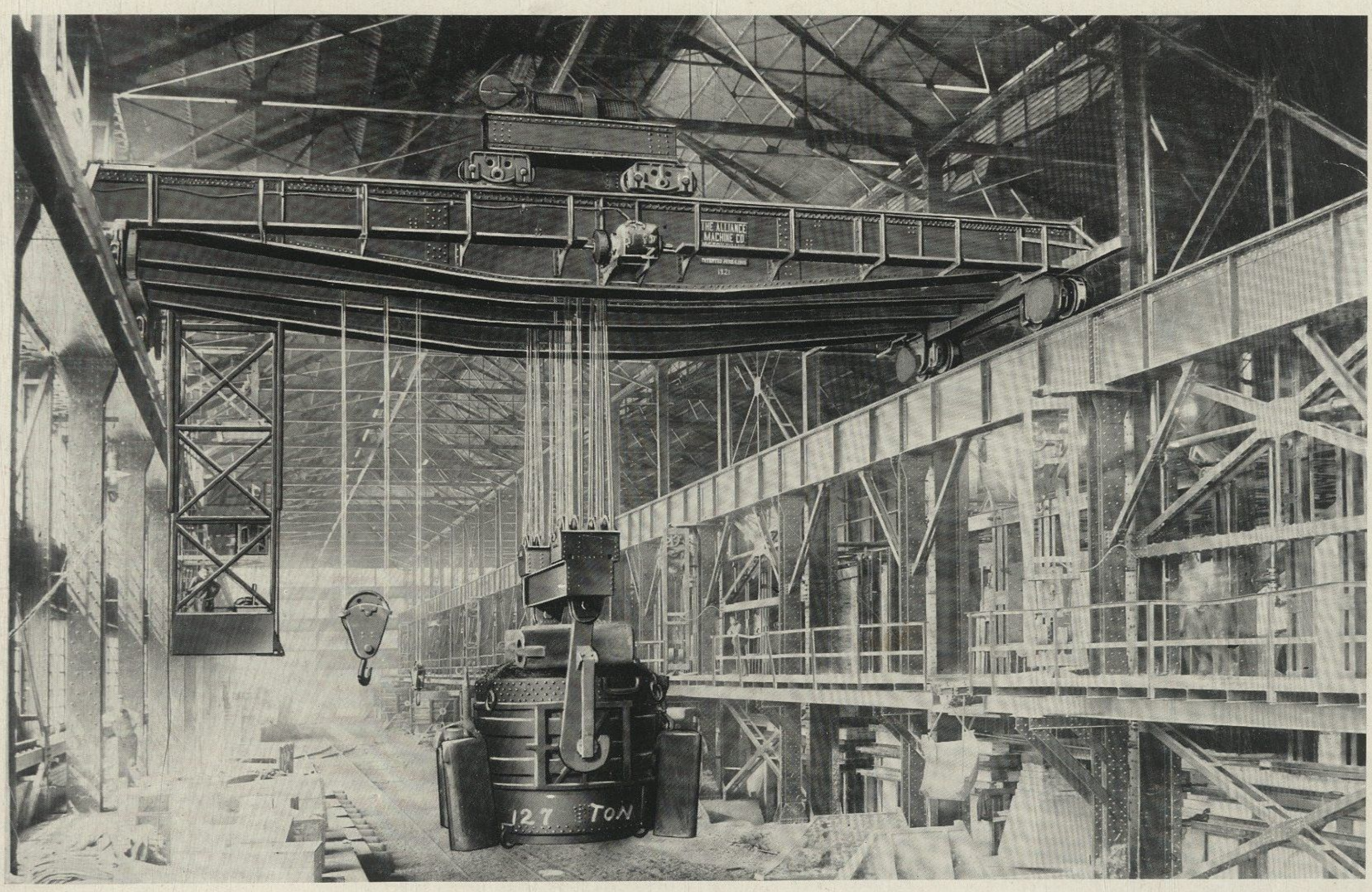
One of three installed in the Edgar Thompson Works, Carnegie Steel Co.
Note load of over 200 tons on hooks, making these the largest cranes of this type ever built



Three One Hundred and Fifty-Ton, Seven-Motor Type, Patented Four-Girder Ladle Cranes—58-Foot 9-Inch Span, with 25-Ton Auxiliary Trolley and 7-Ton Auxiliary Hoist

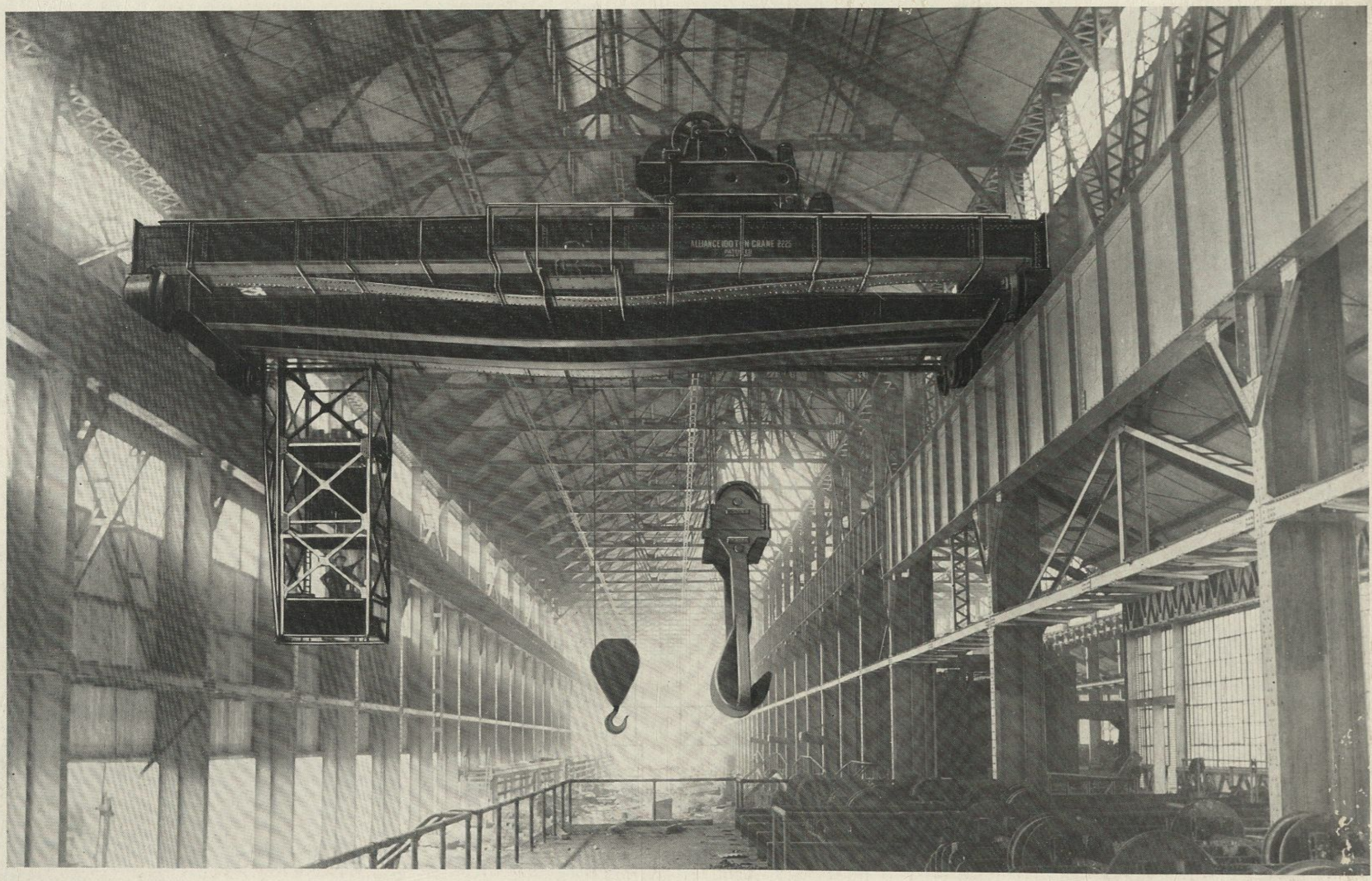
In the Indiana Steel Company's Plant, Gary, Ind.

ALBERT L. STRUVEN,
BALTIMORE,
MARYLAND.

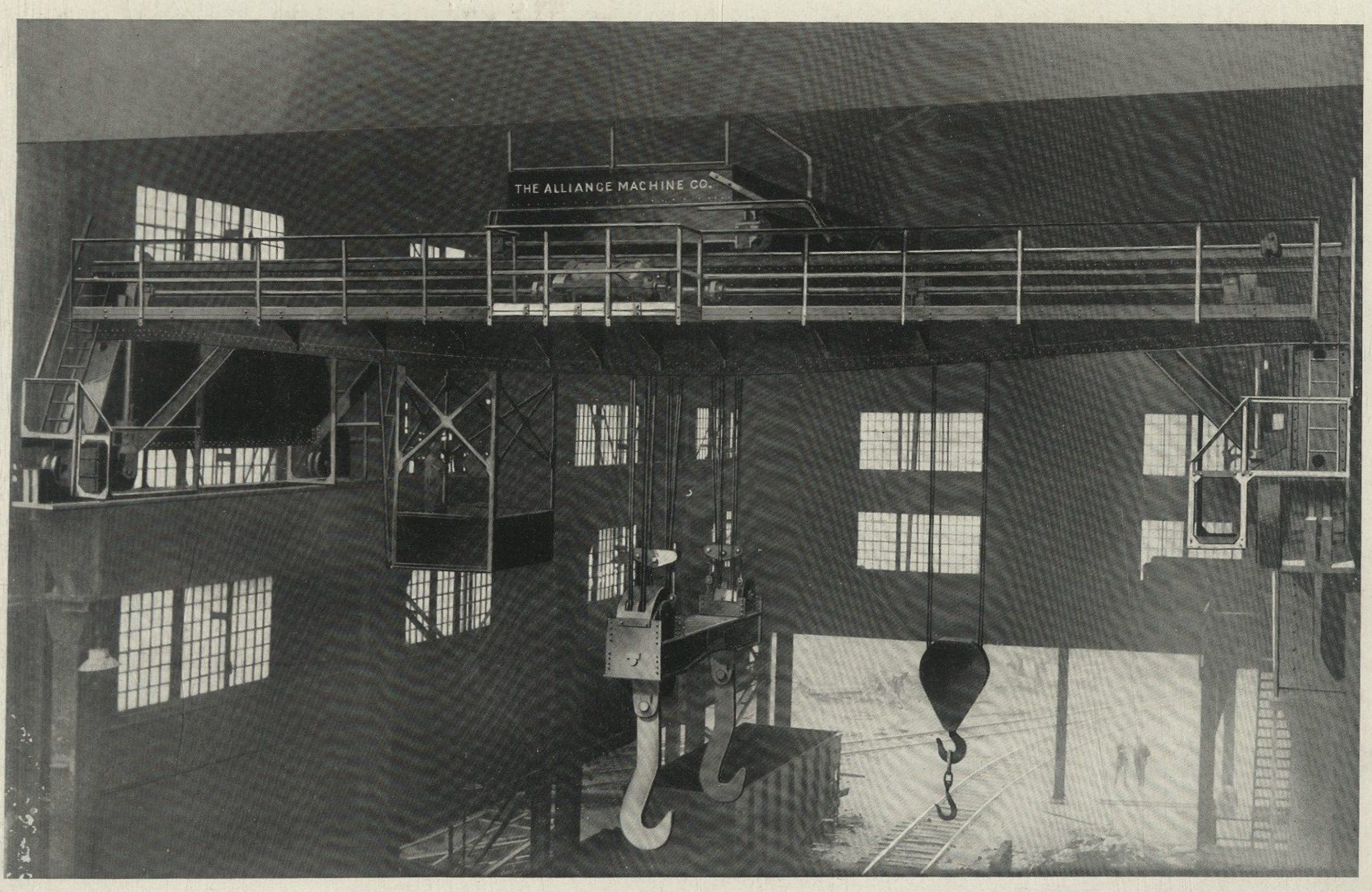

THE ALLIANCE MACHINE CO.
127 TON

One Hundred and Twenty-Five-Ton, Seven-Motor, Patented Four-Girder Ladle Crane—55-Foot 5-Inch Span, with 25-Ton Auxiliary Trolley and 7-Ton Auxiliary Hoist

In the plant of the Pittsburg Steel Co., Monessen, Pa.


ALLIANCE 100 TON CRANE 2225
PATENTED

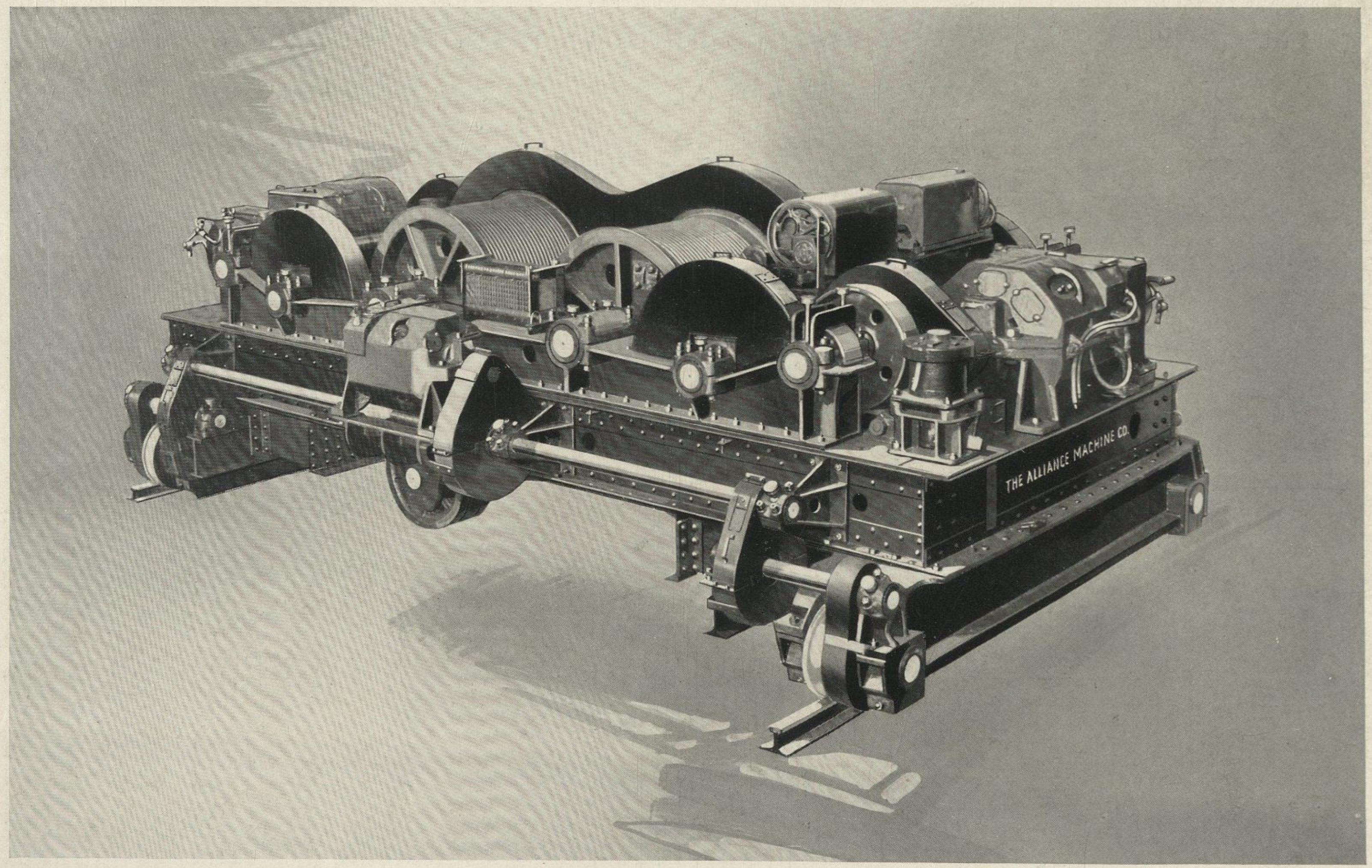
One Hundred-Ton, Patented Four-Girder Ladle Crane—50 Foot 1½-Inch Span, with 25-Ton Auxiliary Trolley
Installed in the plant of the Central Steel Co., Massillon, Ohio



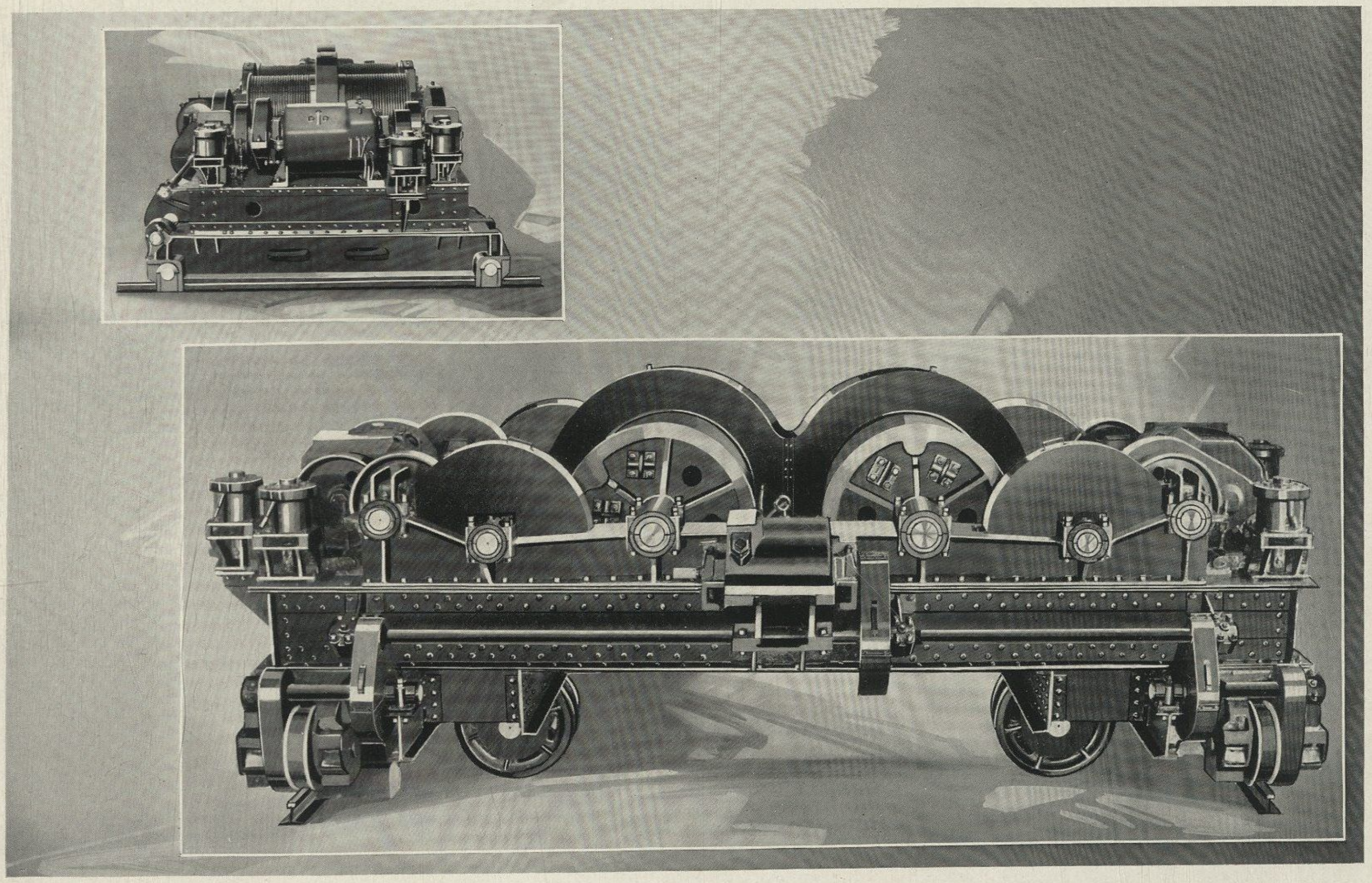
Eighty-Ton, Seven-Motor, Patented Four-Girder Ladle Crane—65-Foot 3-Inch Span, with 25-Ton Auxiliary Trolley

Note special feature of Gantry type end construction to get necessary height
under crane and where it was impossible to raise runway

Built for Pittsburg Steel Co., Monessen, Pa.

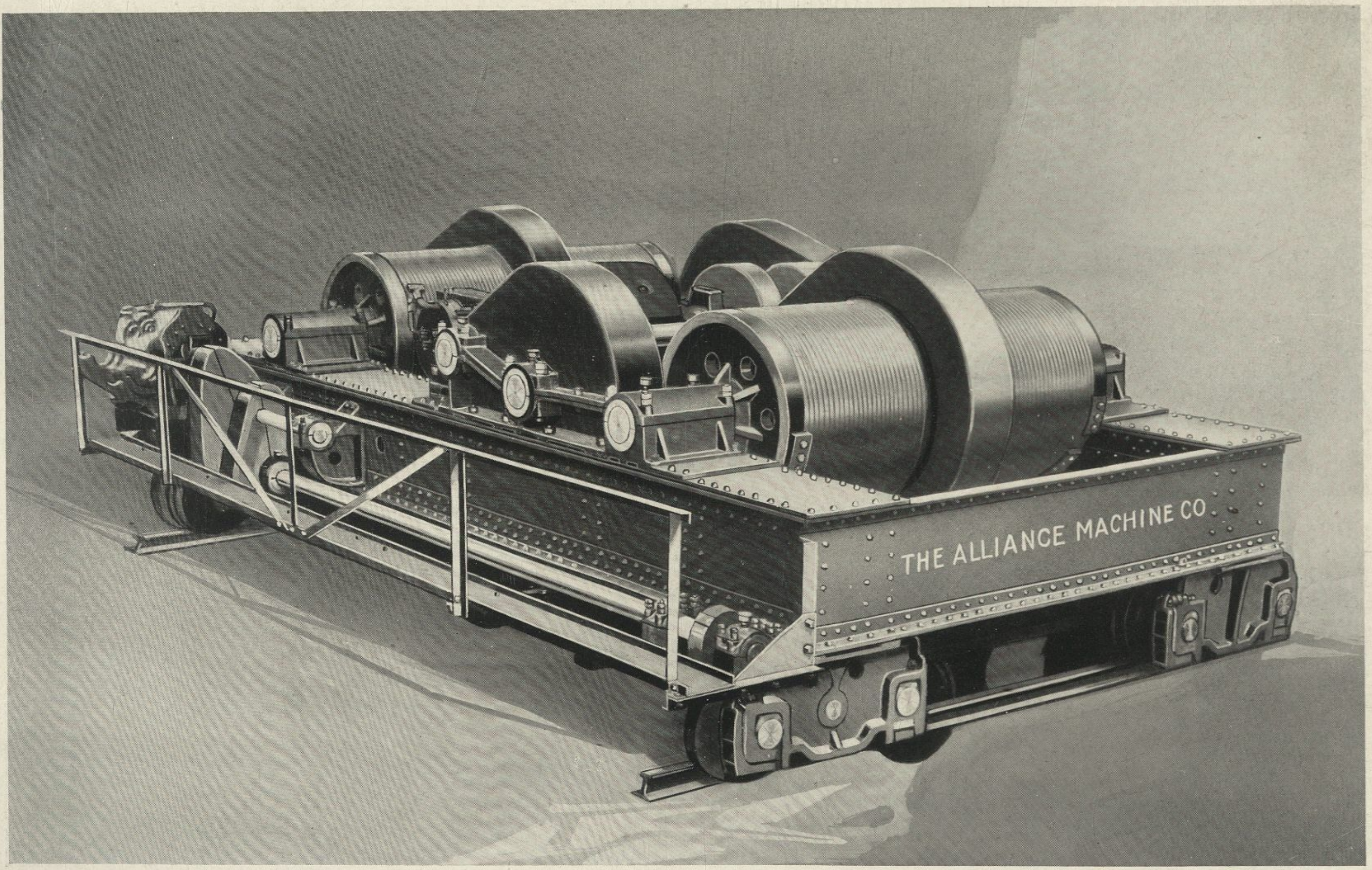

THE ALLIANCE MACHINE CO.

One Hundred-Ton Patented Ladle Crane Trolley with Youngstown Limit Switches
Built for Bethlehem Steel Co.



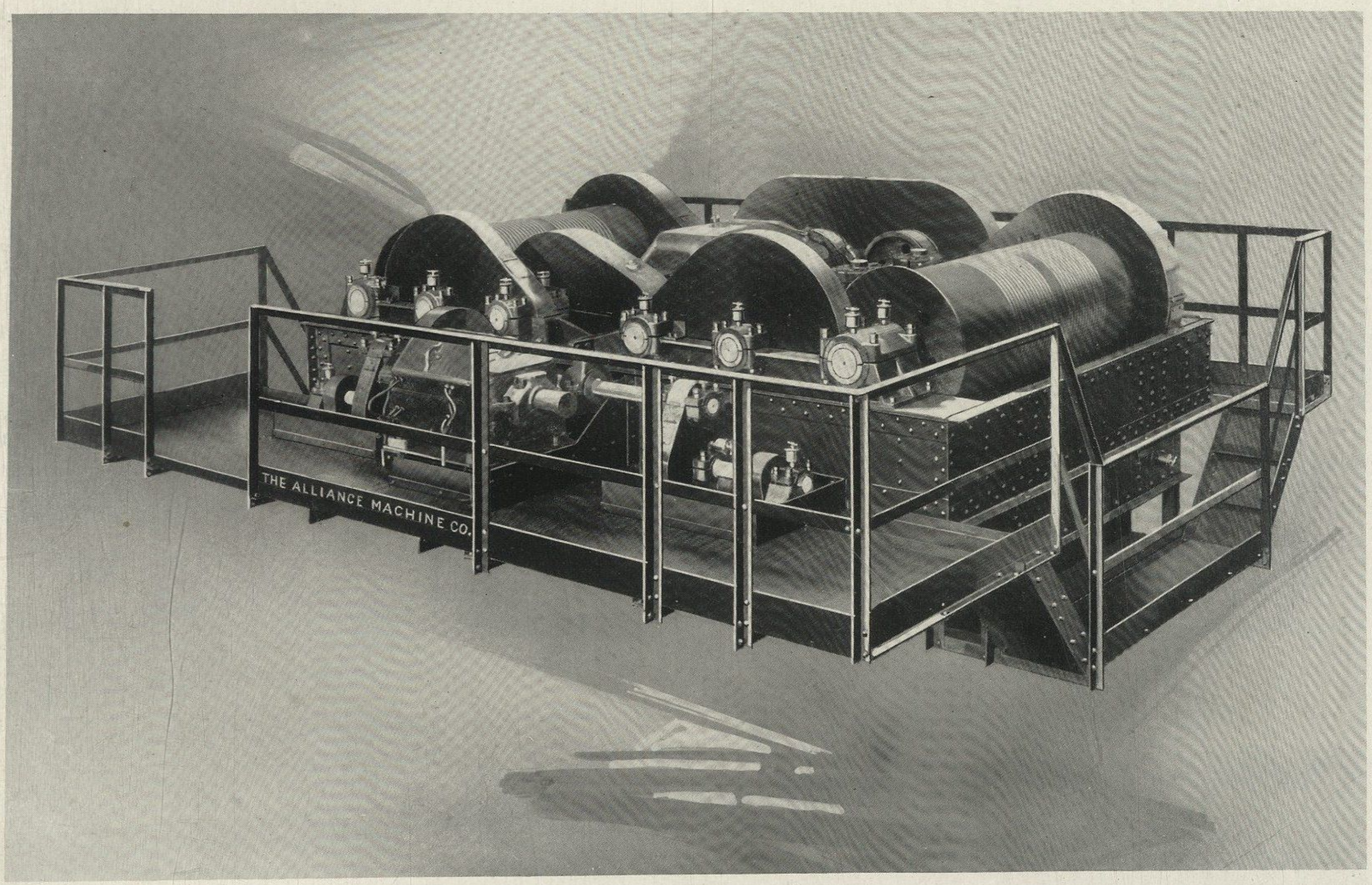
End and Side View Seventy-Five-Ton Patented Ladle Crane Trolley

Furnished Pennsylvania Steel Co., Steelton, Pa.

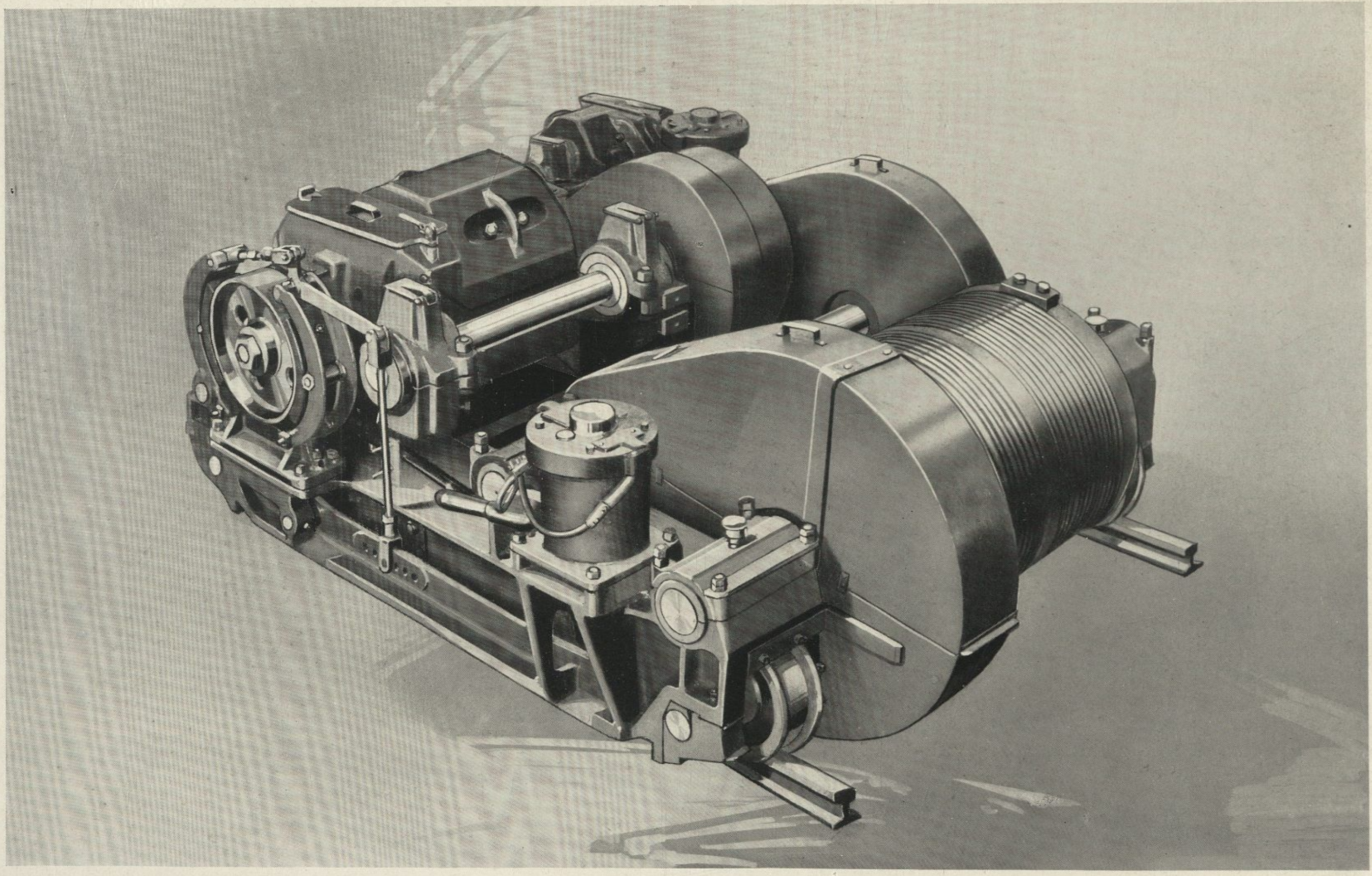

THE ALLIANCE MACHINE CO

One Hundred and Fifty-Ton Ladle Crane Trolley

Built for Jones & Laughlin Steel Co.—Alliquippa Works

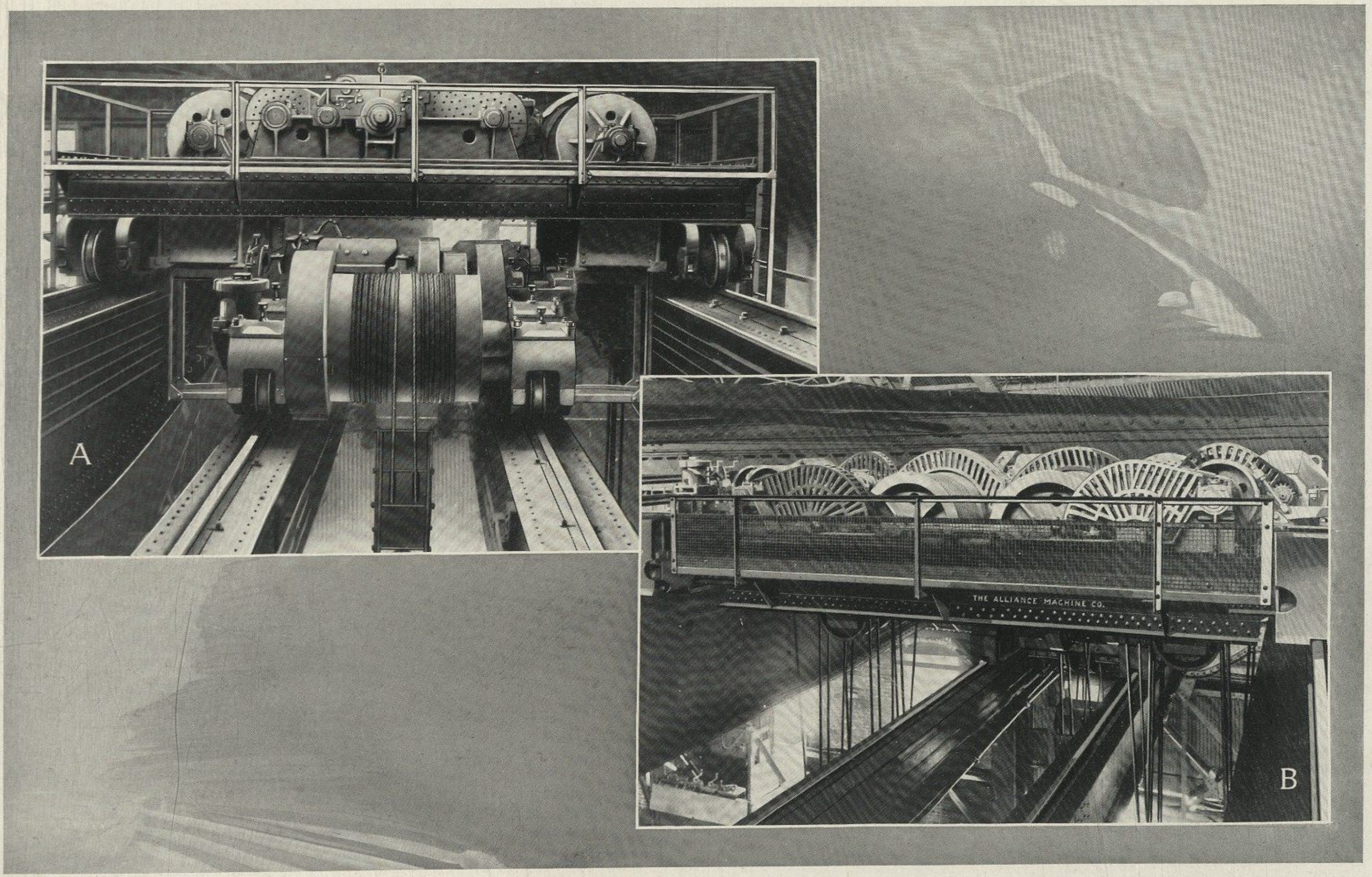


One of Four Sixty-Ton Modern Ladle Crane Trolleys
Designed for use on existing bridges of another make of crane
Built for the Carnegie Steel Co.—Homestead Works. Note foot walks to give accessibility.



Typical Auxiliary Trolley

Used on our Patented Four-Girder Ladle Cranes and made in all capacities



A—One Hundred-Ton Ladle Crane—25-Ton Auxiliary Trolley

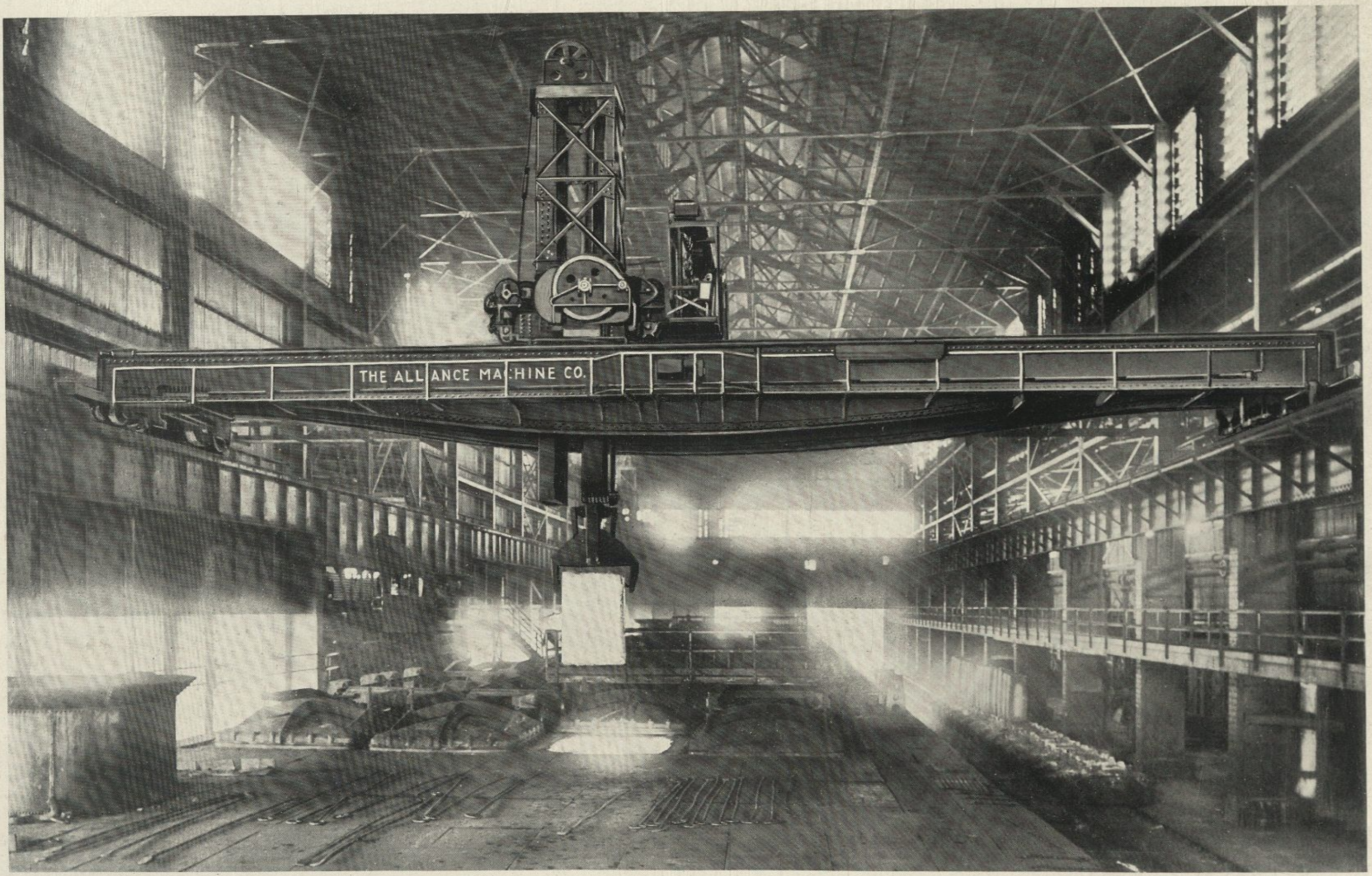
Showing safety platforms and accessibility to upper sheaves and auxiliary trolley

Installed in plant of Inland Steel Co.

B—One Hundred-Ton Ladle Crane

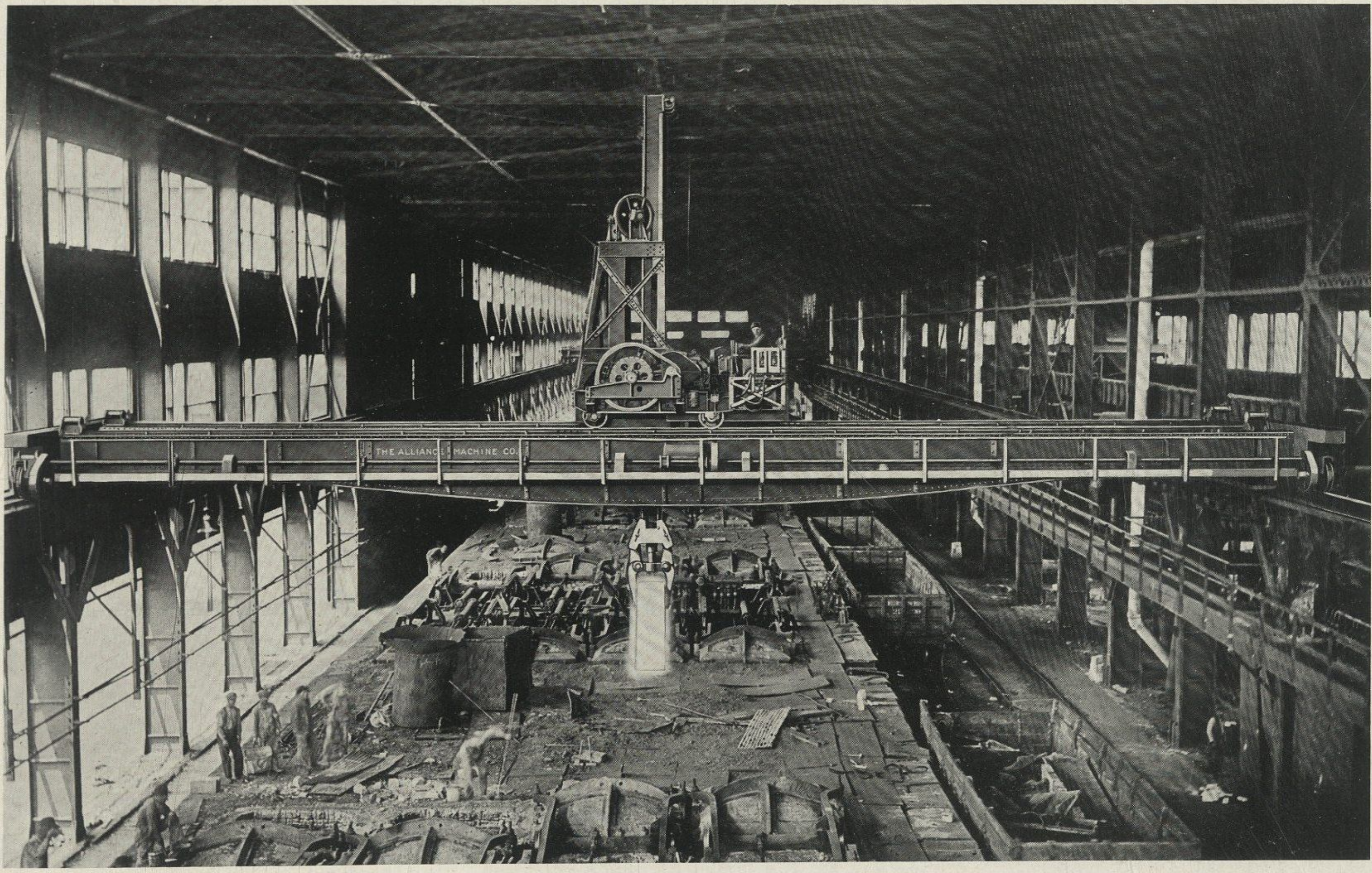
Designed to occupy space of only 7 feet 2¾ inches and designed throughout with a safety factor of 10. Note Latticed Observation Gear Guards

Designed and built for Illinois Steel Co.


THE ALLIANCE MACHINE CO.

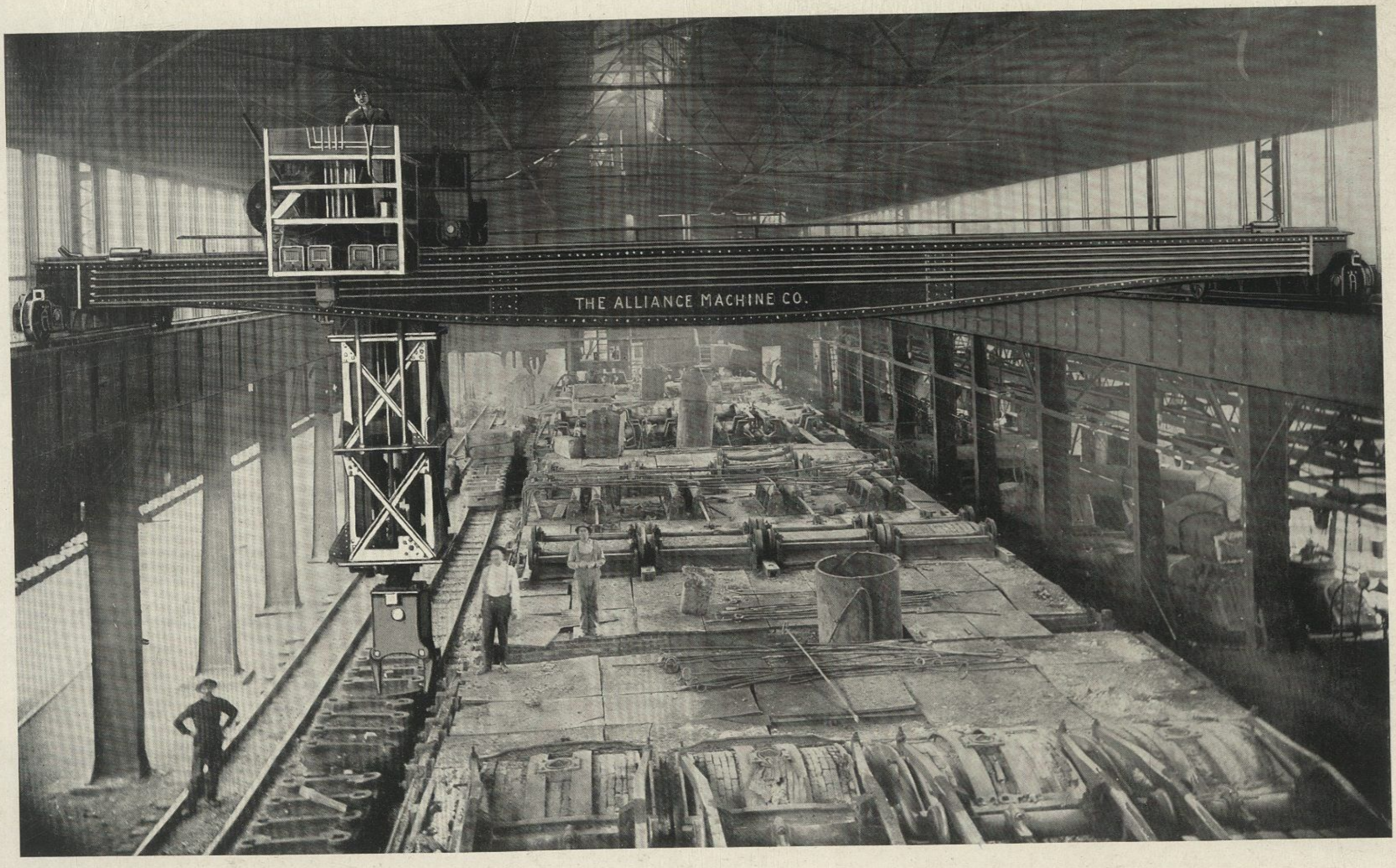
The Largest Soaking Pit Crane in the World—25 Tons Capacity
Maximum Range of Tongs, 66 Inches—84-Foot Span

Two of these installed in the plant of Indiana Steel Co., Gary, Ind.

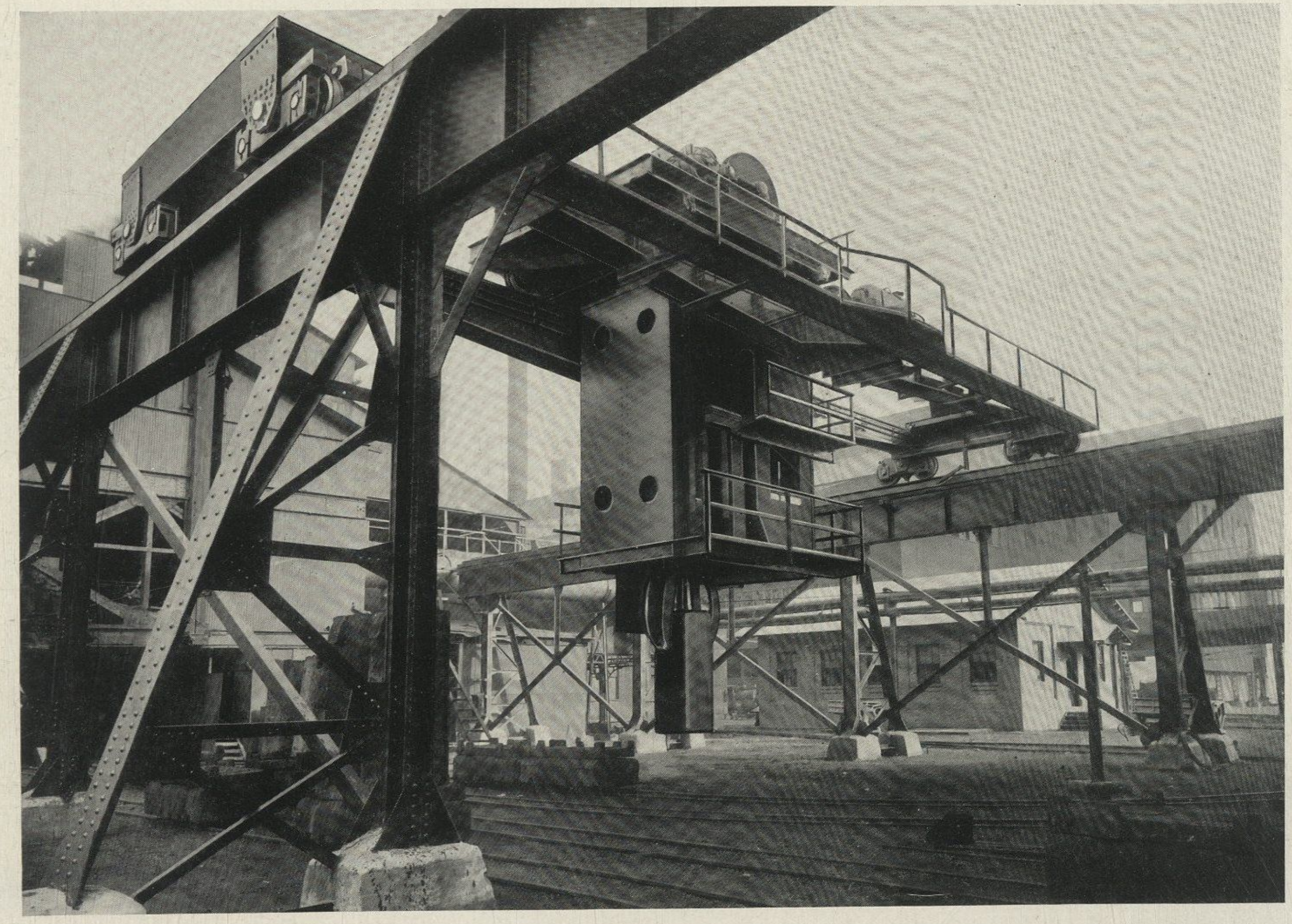

THE ALLIANCE MACHINE CO.

Seven and One-Half-Ton Soaking Pit Crane—80-Foot Span

In the plant of the Indiana Steel Co., Gary, Ind.

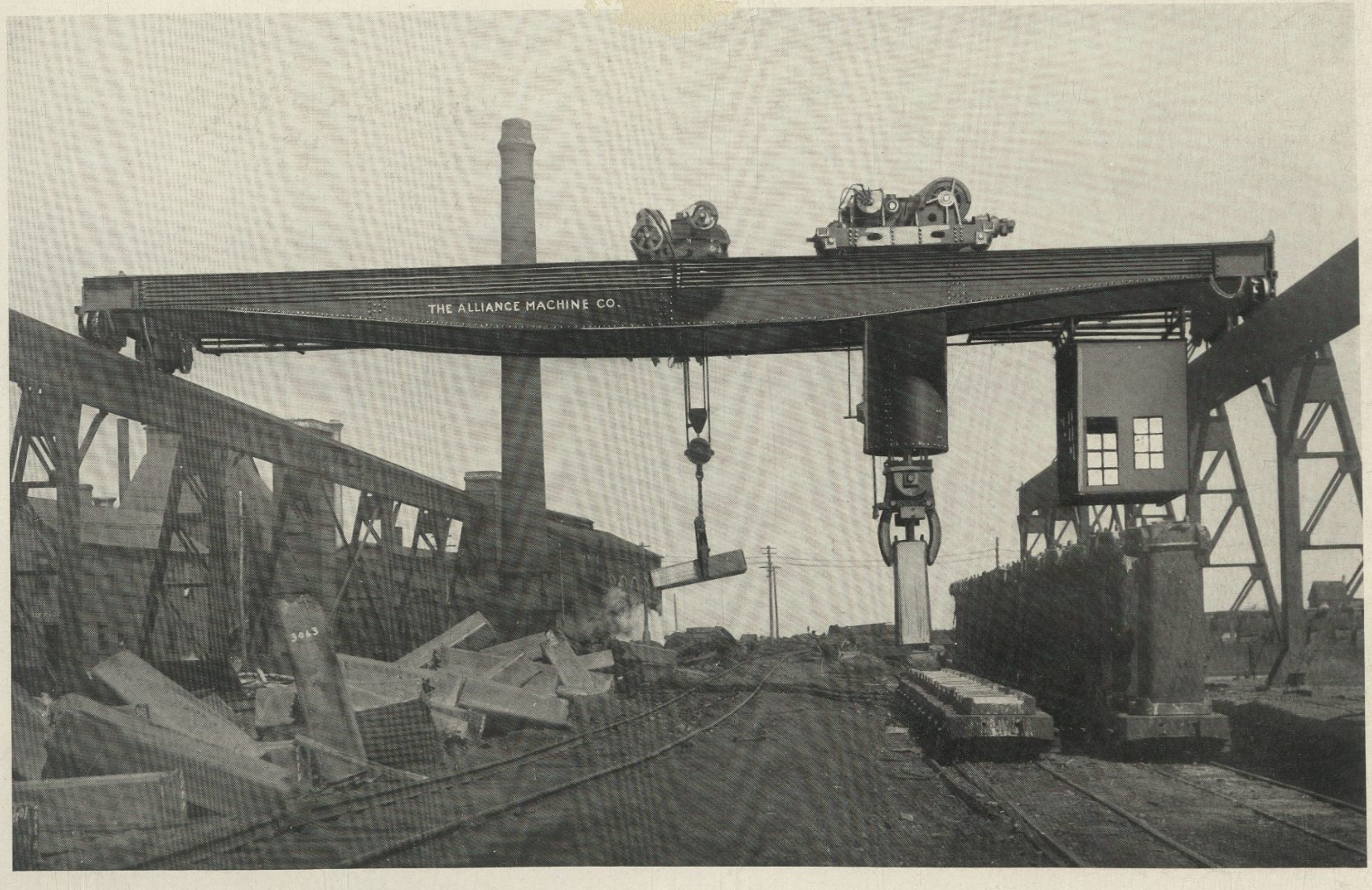

THE ALLIANCE MACHINE CO.

Seven and One-Half-Ton Low Type Vertical Charging or Soaking Pit Crane—57-Foot Span
Built for the Republic Iron & Steel Co., Youngstown, Ohio

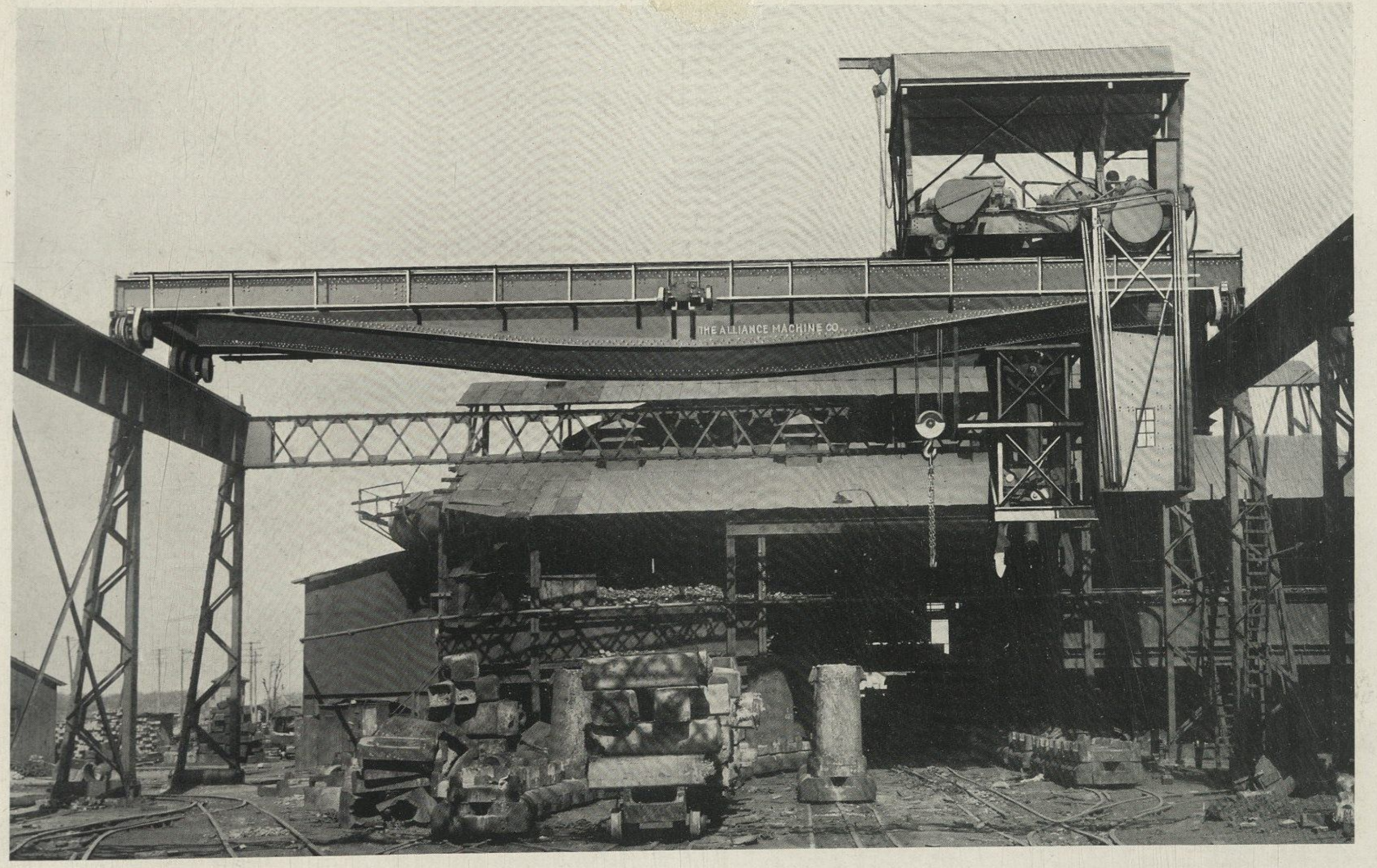


One Hundred-Ton, Six-Motor, Rope Type Duplex Stripper—57-Foot Span

Built for the Maryland Steel Co., Sparrows Point, Md.


THE ALLIANCE MACHINE CO.
3063

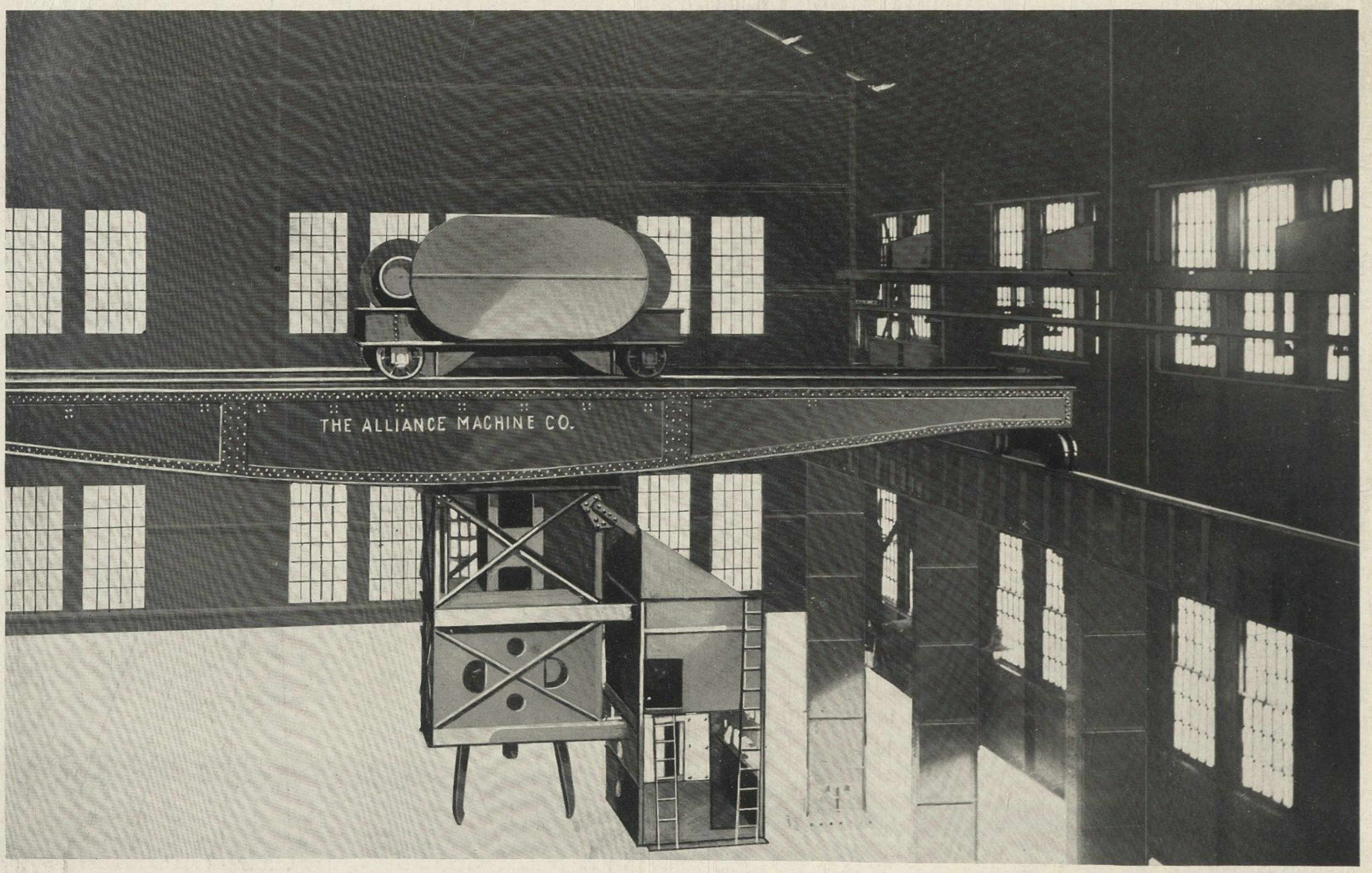
One Hundred and Fifty-Ton Rope Stripper—75-Foot Span, with 15-Ton Ingot Trolley
Built for the Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N. S.



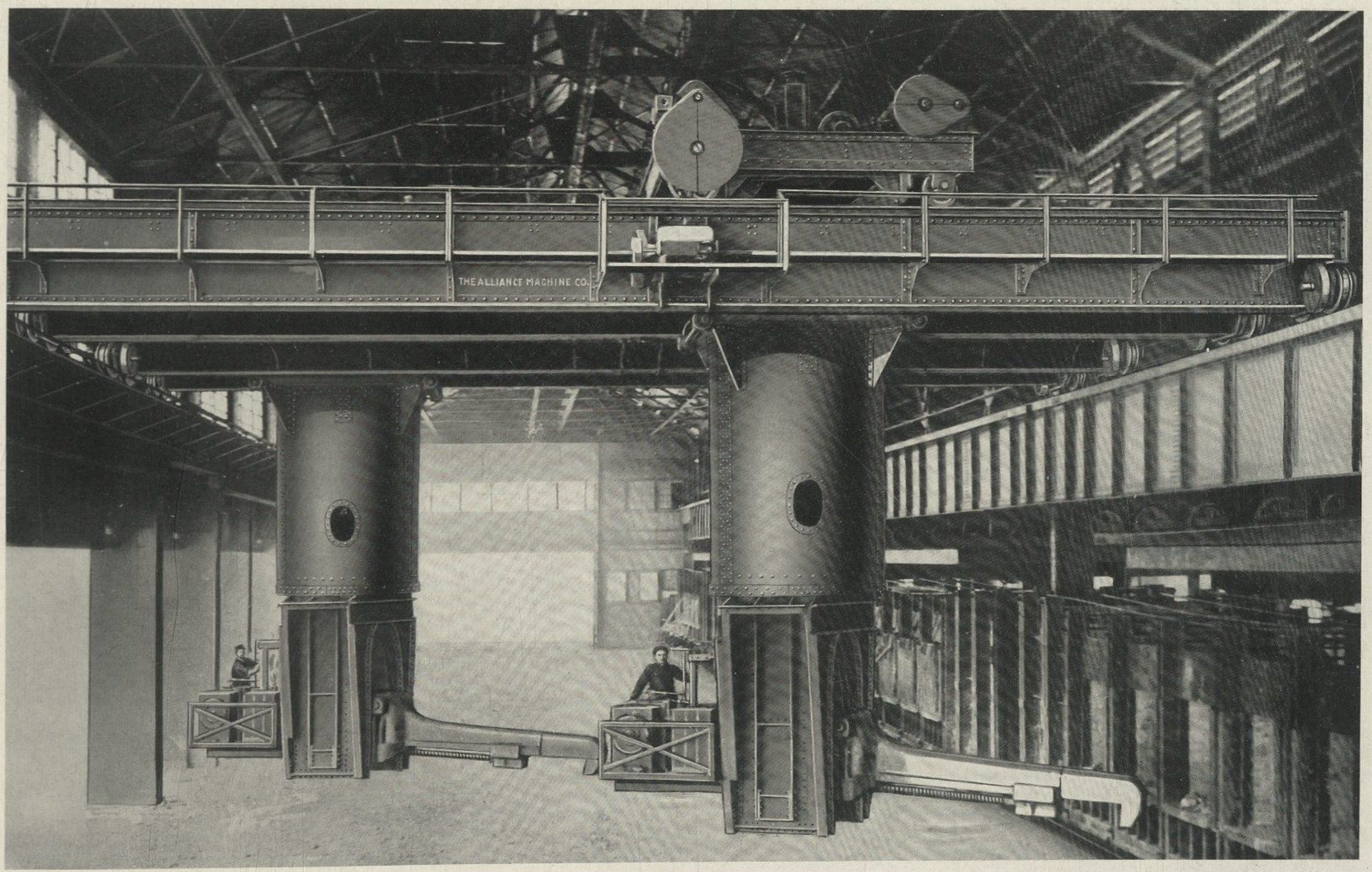
Three Hundred and Twenty-Ton Hydro-Electric Stripping Cranes

Designed and built for the Pennsylvania Steel Company

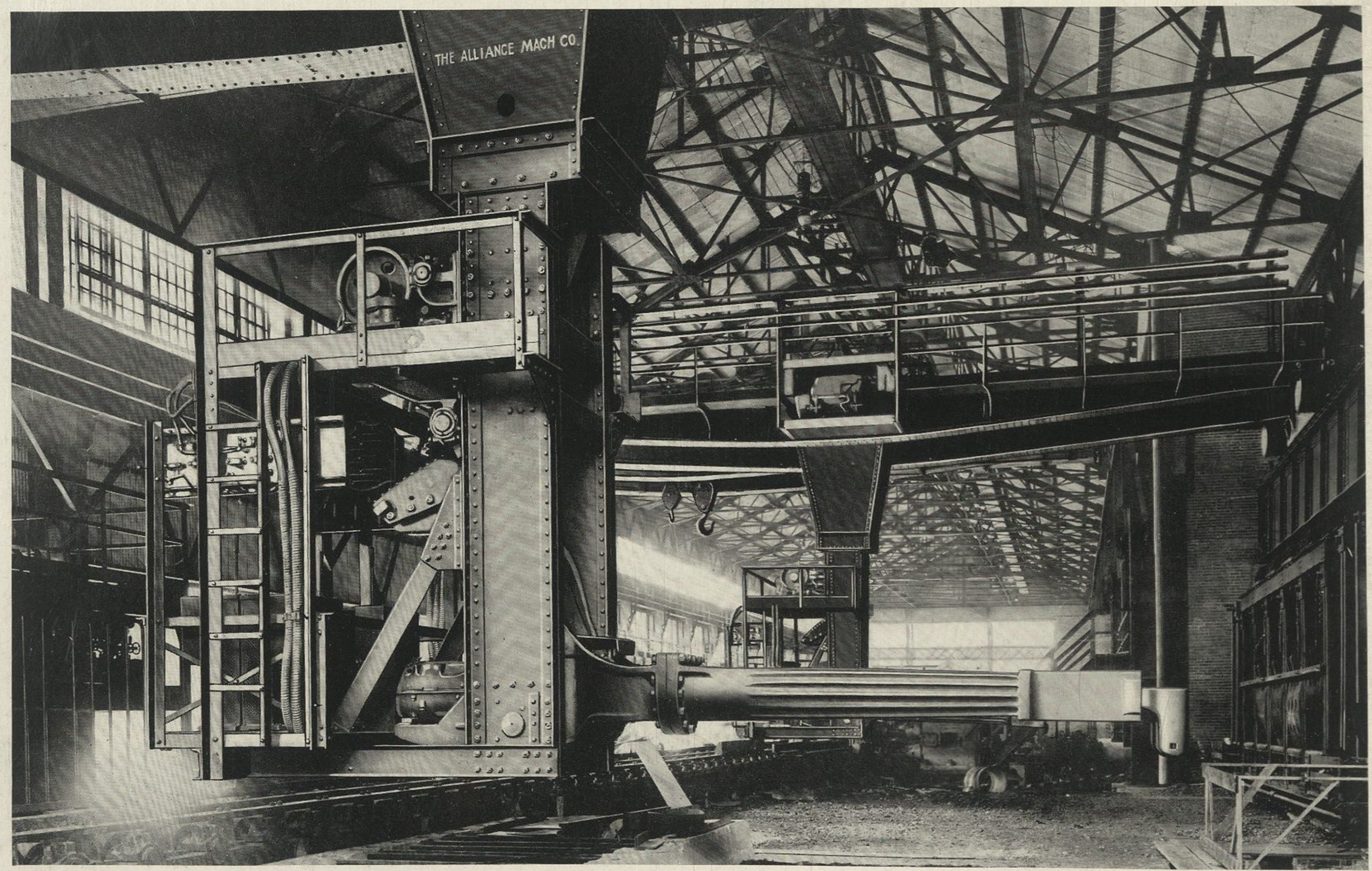
In this stripper the hoisting, trolley traveling and bridge traveling motions are effected by electric motors, and the stripping motions are effected by a hydraulic cylinder supplied with high pressure water from an electrically driven pump.


THE ALLIANCE MACHINE CO.

Two Hundred-Ton, Four-Motor Rope Stripper
Indiana Steel Co., Gary, Ind.

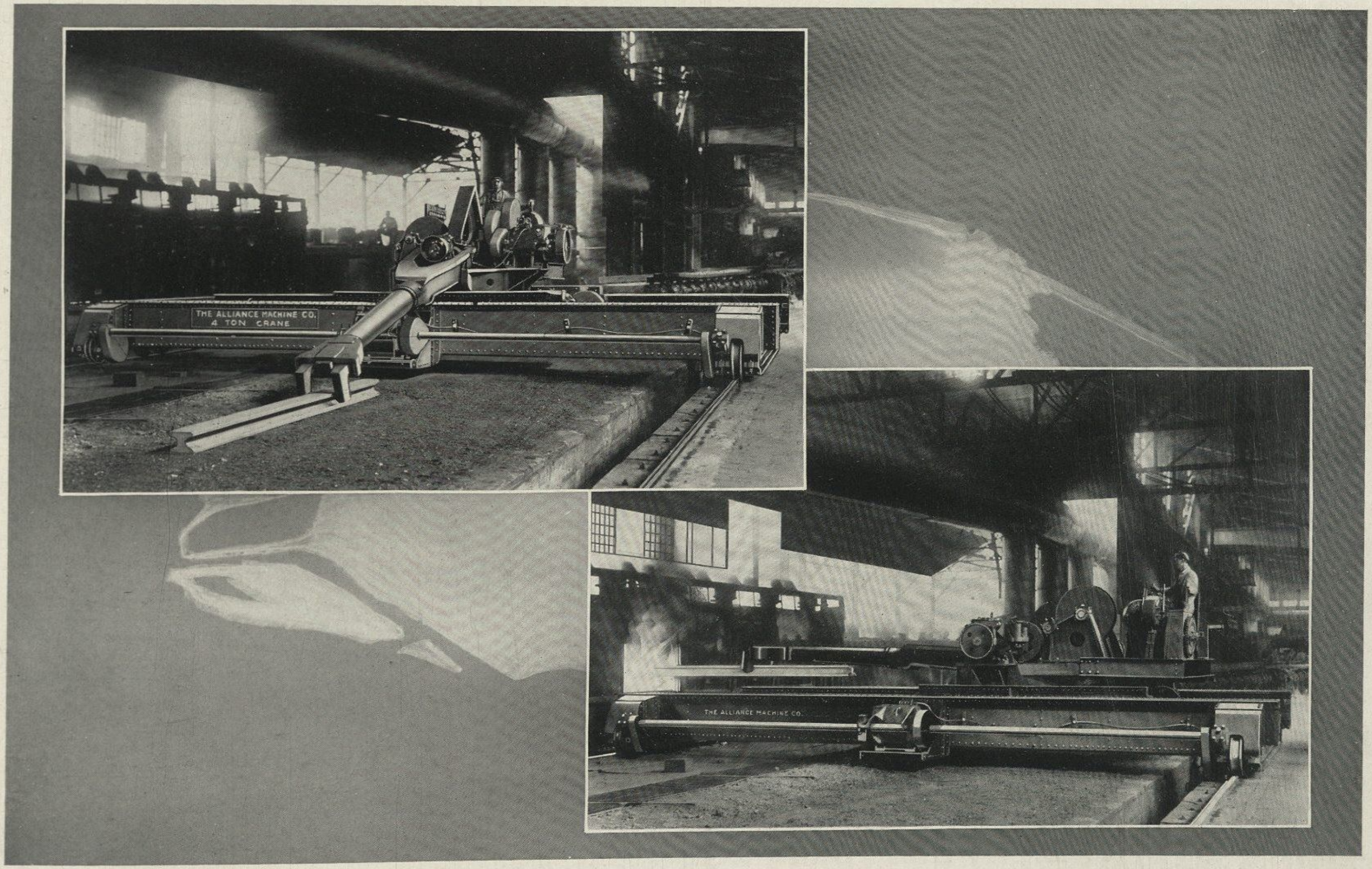

THE ALLIANCE MACHINE CO.

Two Fifteen-Ton, Six-Motor, Revolving Crane Type Slab Chargers—56-Foot Span with Vertical Lift and End Grip
Indiana Steel Co., Gary, Ind.



Two Five-Ton, Six-Motor, Revolving Crane Type Slab and Ingot Chargers—54-Foot 8-Inch Span with Elbow Motion and Side Grips

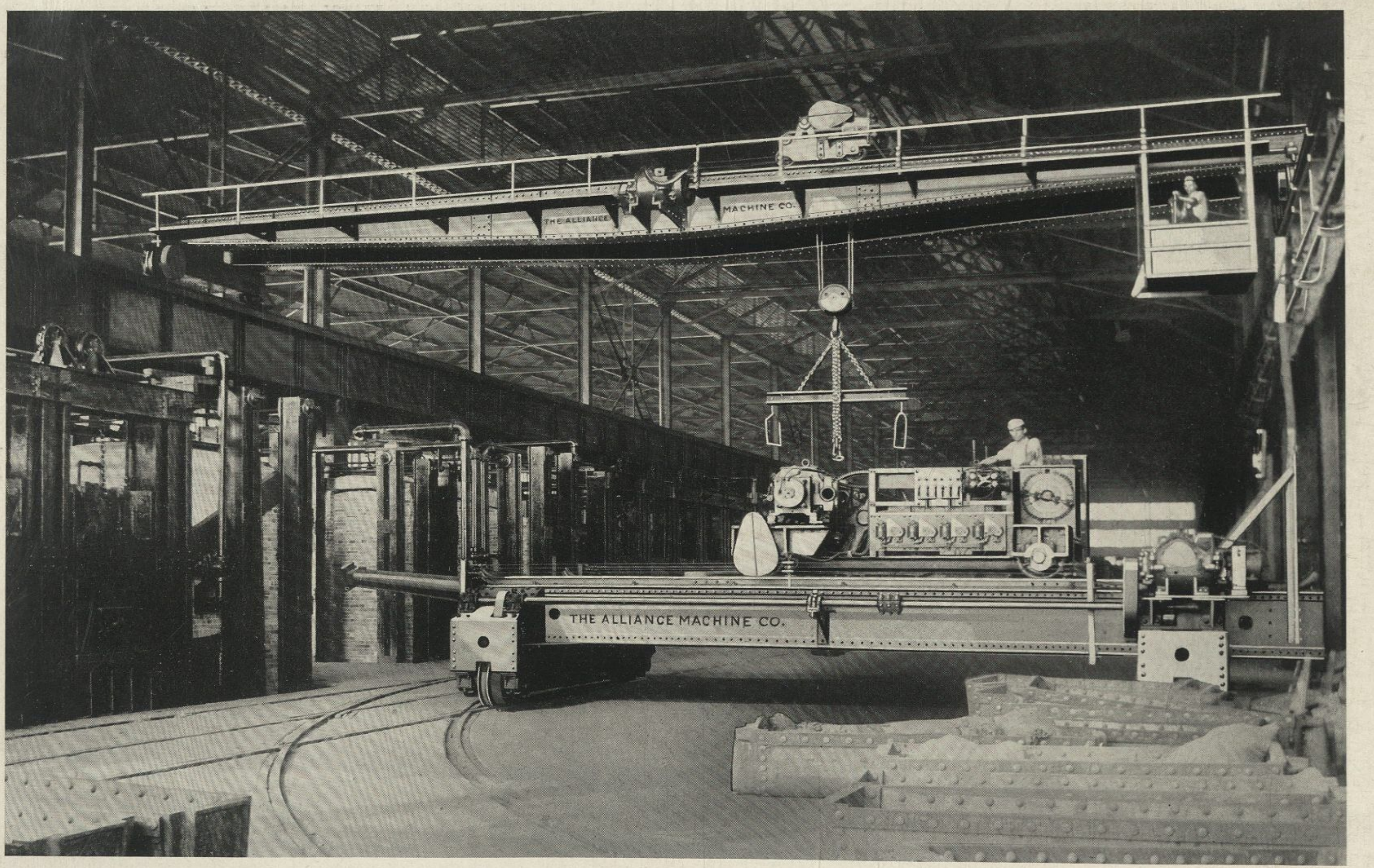
Installed in plant Illinois Steel Co., So. Chicago


THE ALLIANCE MACHINE CO.
4 TON CRANE
THE ALLIANCE MACHINE CO.

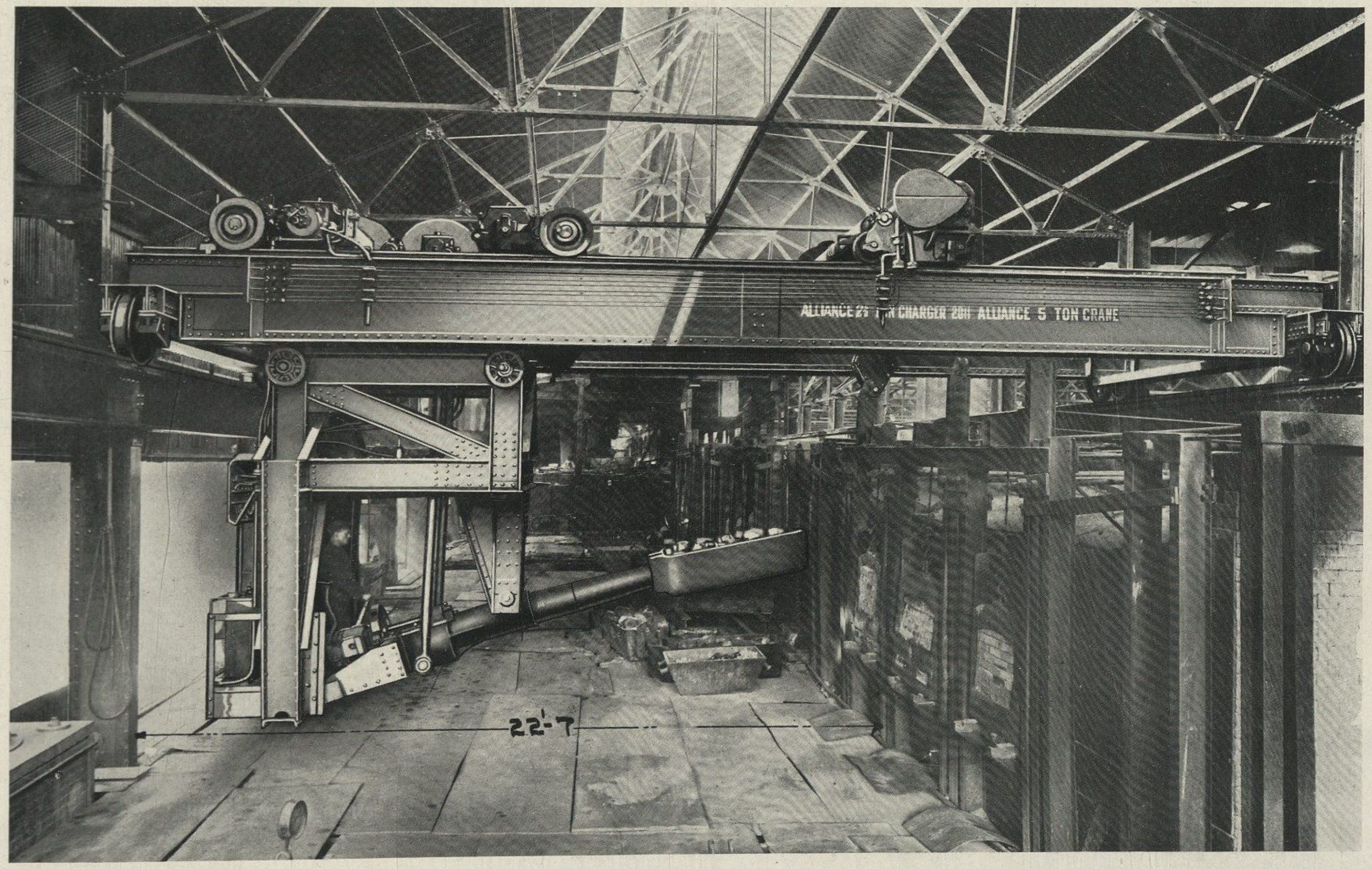
Floor Type Charging and Drawing Machine

Built for Eastern Steel Co., Pottsville, Pa.

Top view illustrates machine picking up beam blank. Lower view, delivering blank into furnace.
This machine is very rapid and is adapted for handling billets, blooms or slabs.

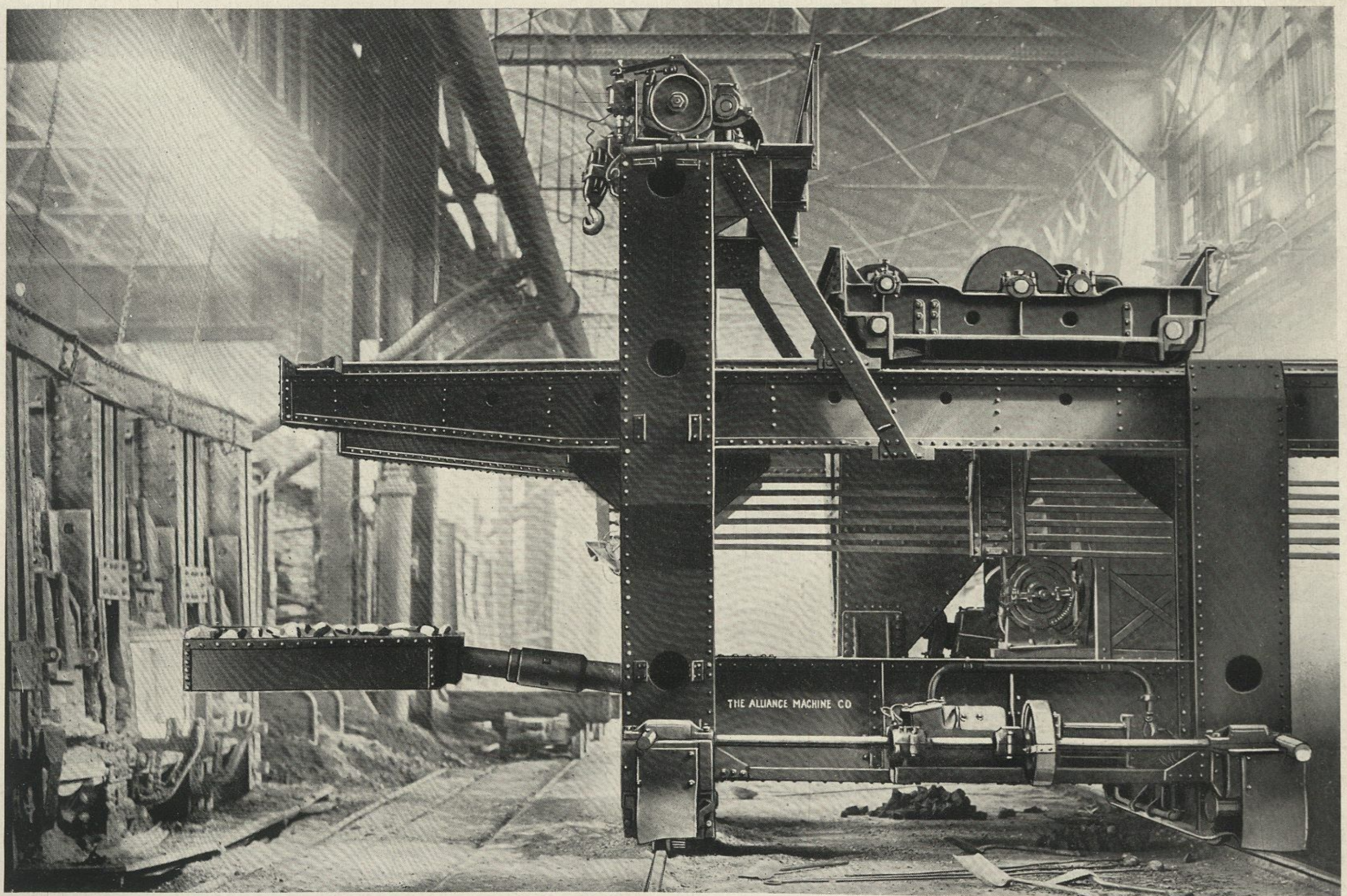

THE ALLIANCE
MACHINE CO.
THE ALLIANCE MACHINE CO.

Showing Application of Low Floor Type Charging Machine
In Open Hearth Department of the Pittsburg Steel Co., Monessen, Pa.
Cut shows relative location in relation to furnaces as well as provision for ample floor clearance

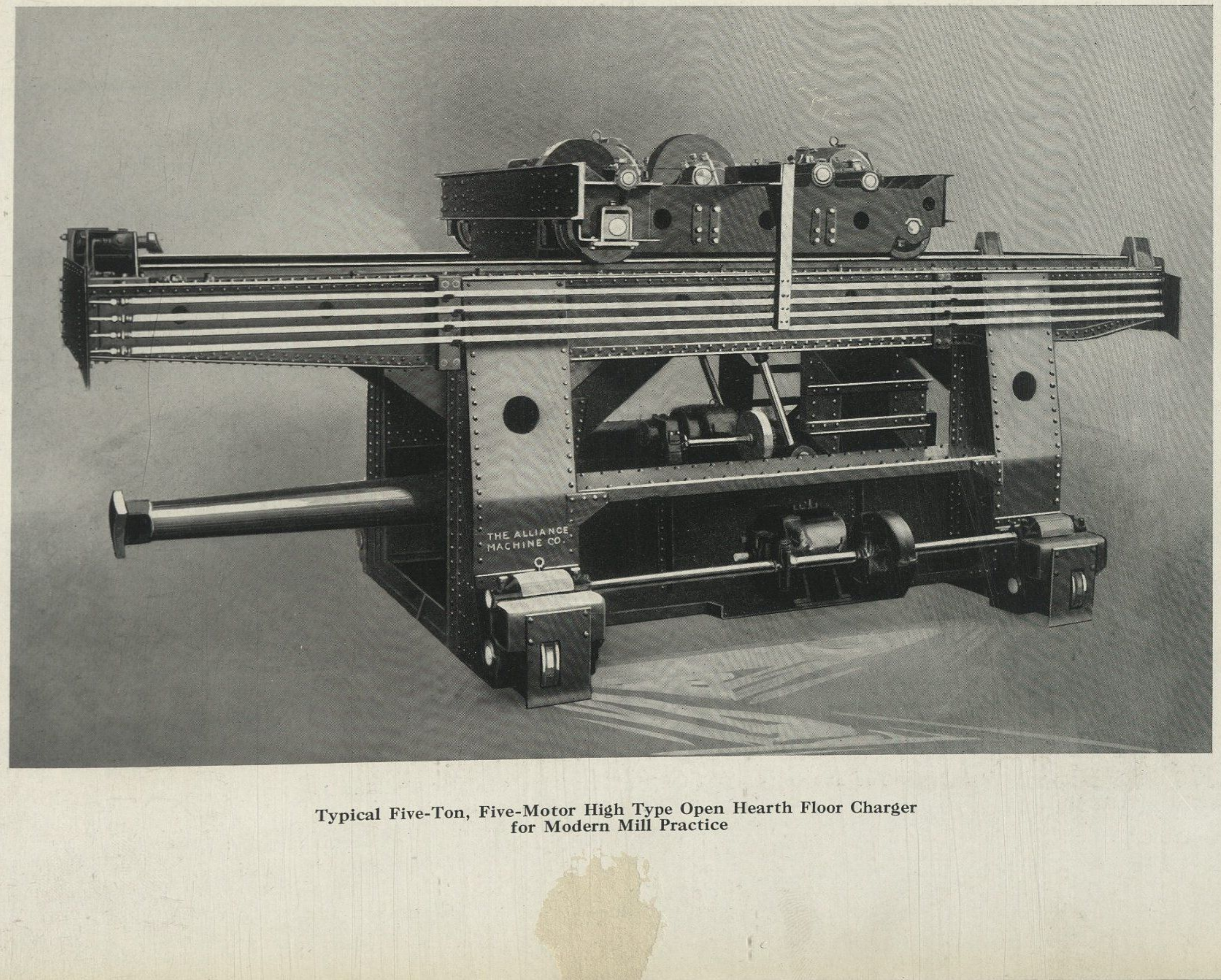

ALLIANCE 2½ TON CHARGER 2011 ALLIANCE 5 TON CRANE
22'-7

Two and One-Half-Ton Charging Machine—37-Foot Span

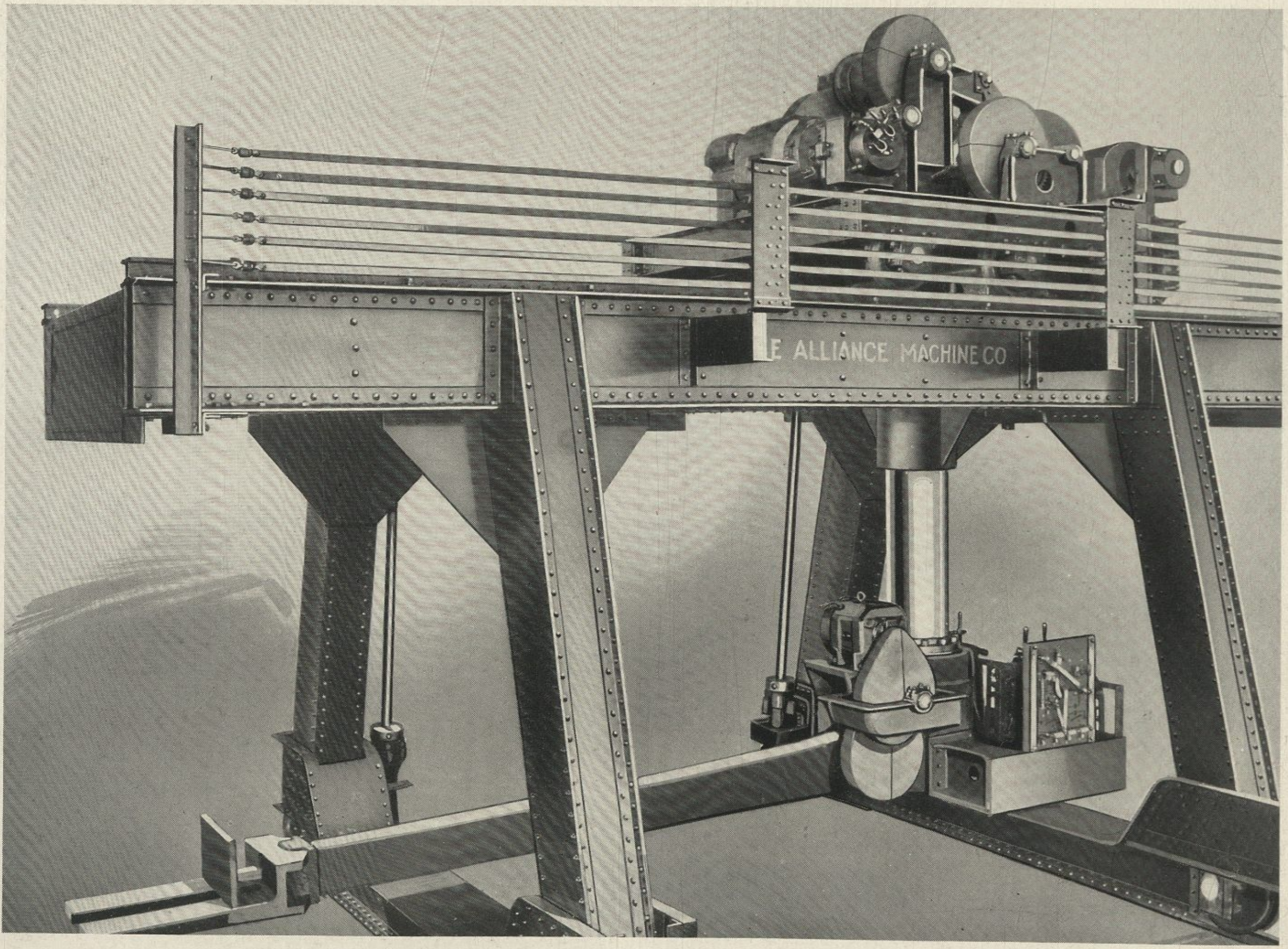
Note limited space of 22 feet 7 inches from face of runway column to furnace
Provided with 5-ton Auxiliary Trolley
Built for Pratt & Letchworth Co., Buffalo, N. Y.


THE ALLIANCE MACHINE CO

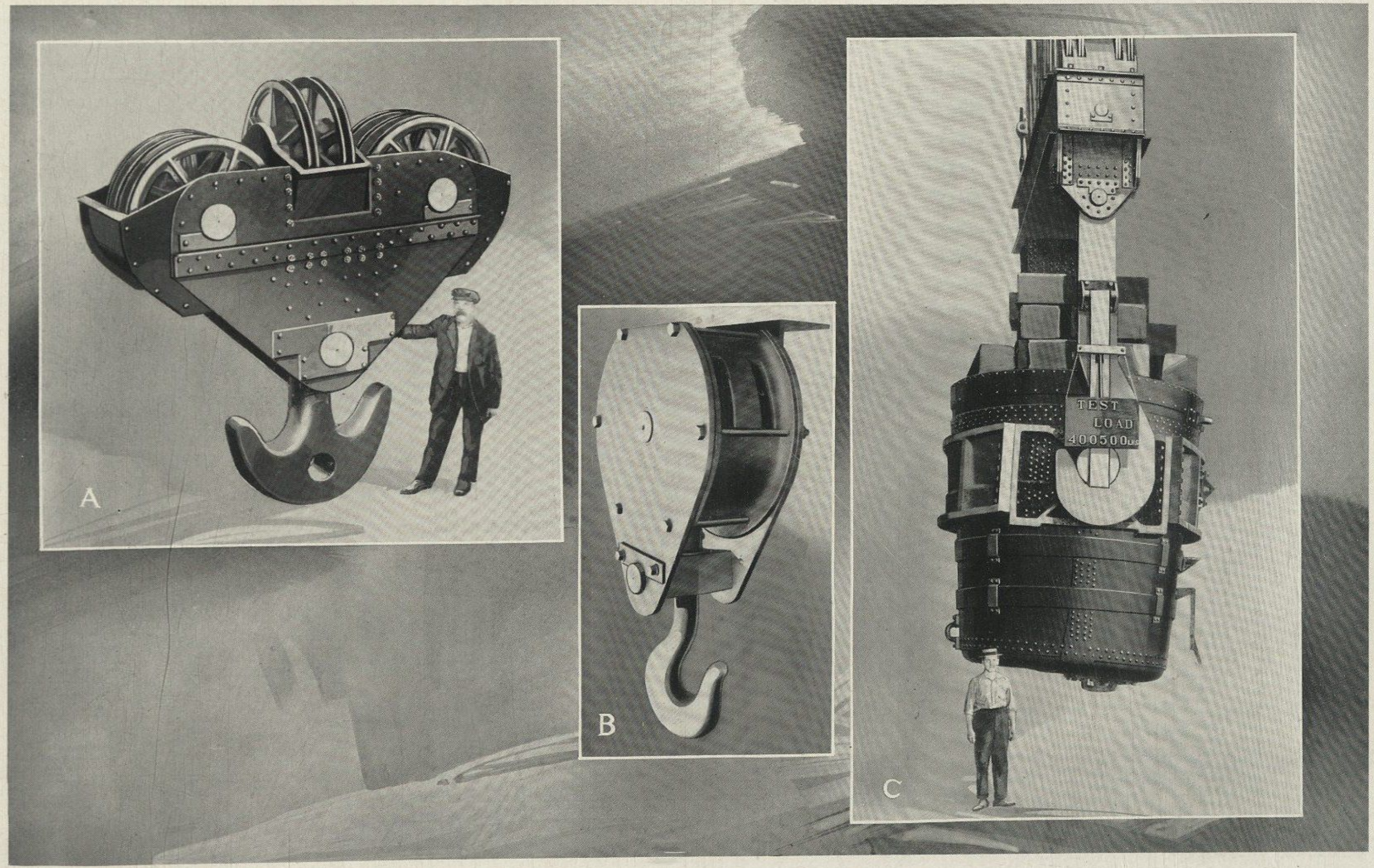
Five-Ton High Type Floor Charger


THE ALLIANCE
MACHINE CO.

Typical Five-Ton, Five-Motor High Type Open Hearth Floor Charger
for Modern Mill Practice

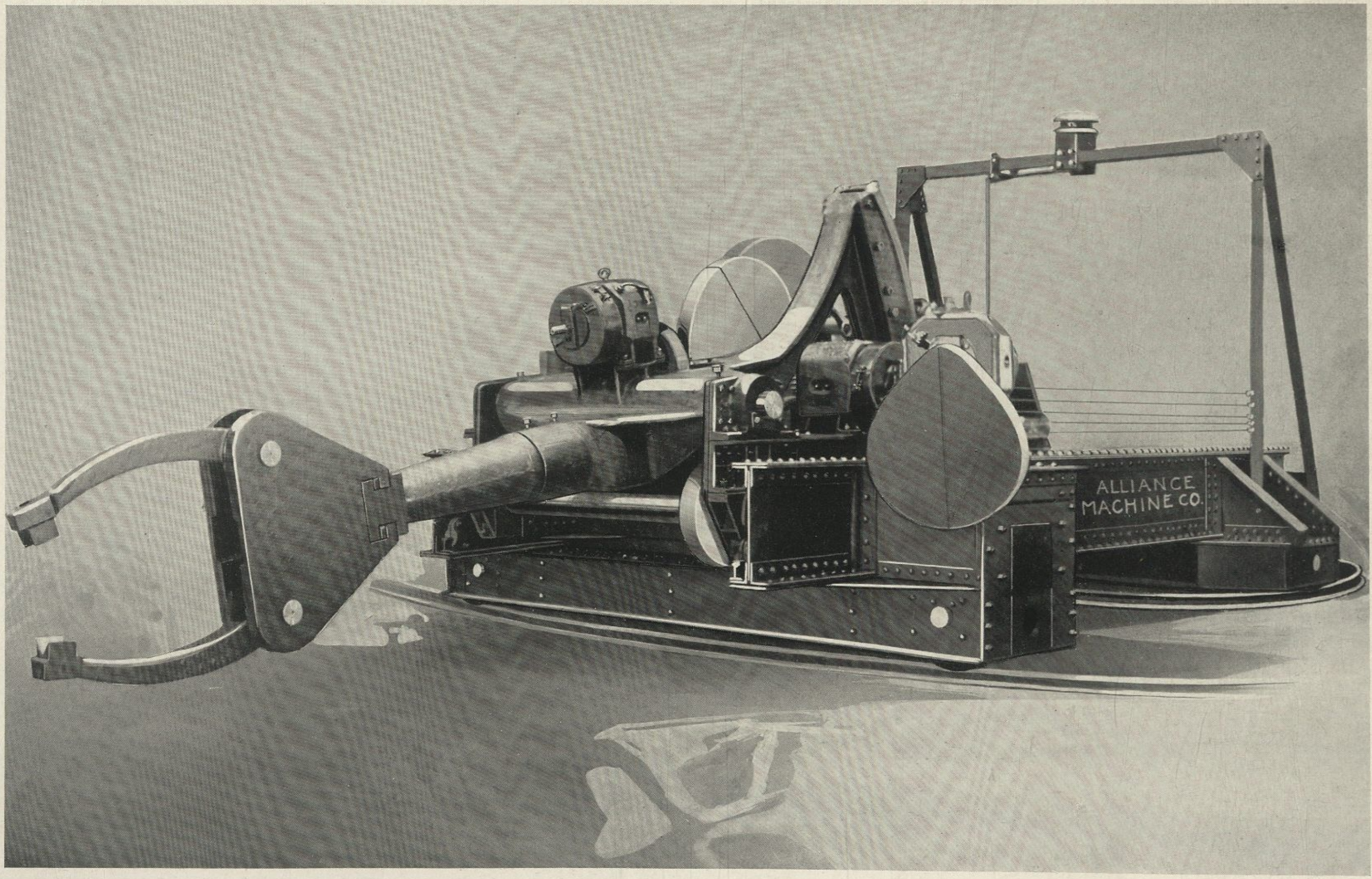

E ALLIANCE MACHINE CO

Two and One-Half-Ton High Floor Type Charging Machine
Arranged specially for charging Copper Cathodes
Raritan Copper Works, Raritan, N. J.


A
B
TEST
LOAD
400500 LBS
C

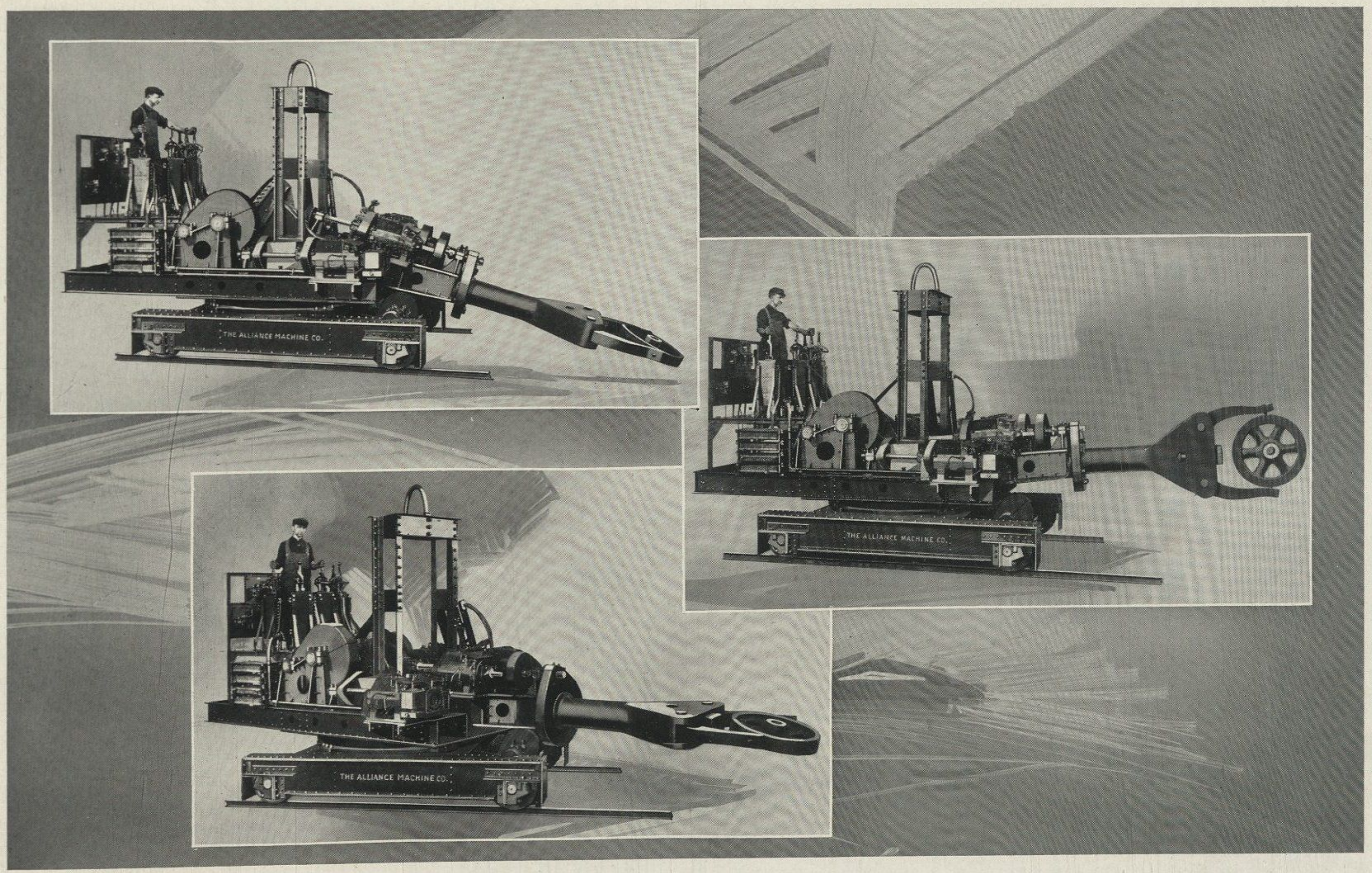
Types of Hook Blocks

A—200-ton capacity with Twin Forged Hook. Weight, 29,686 pounds.
B—10-ton Standard Block with Forged Hook.
C—200-ton Ladle Crane Beam with Laminated Hooks.


ALLIANCE
MACHINE CO.

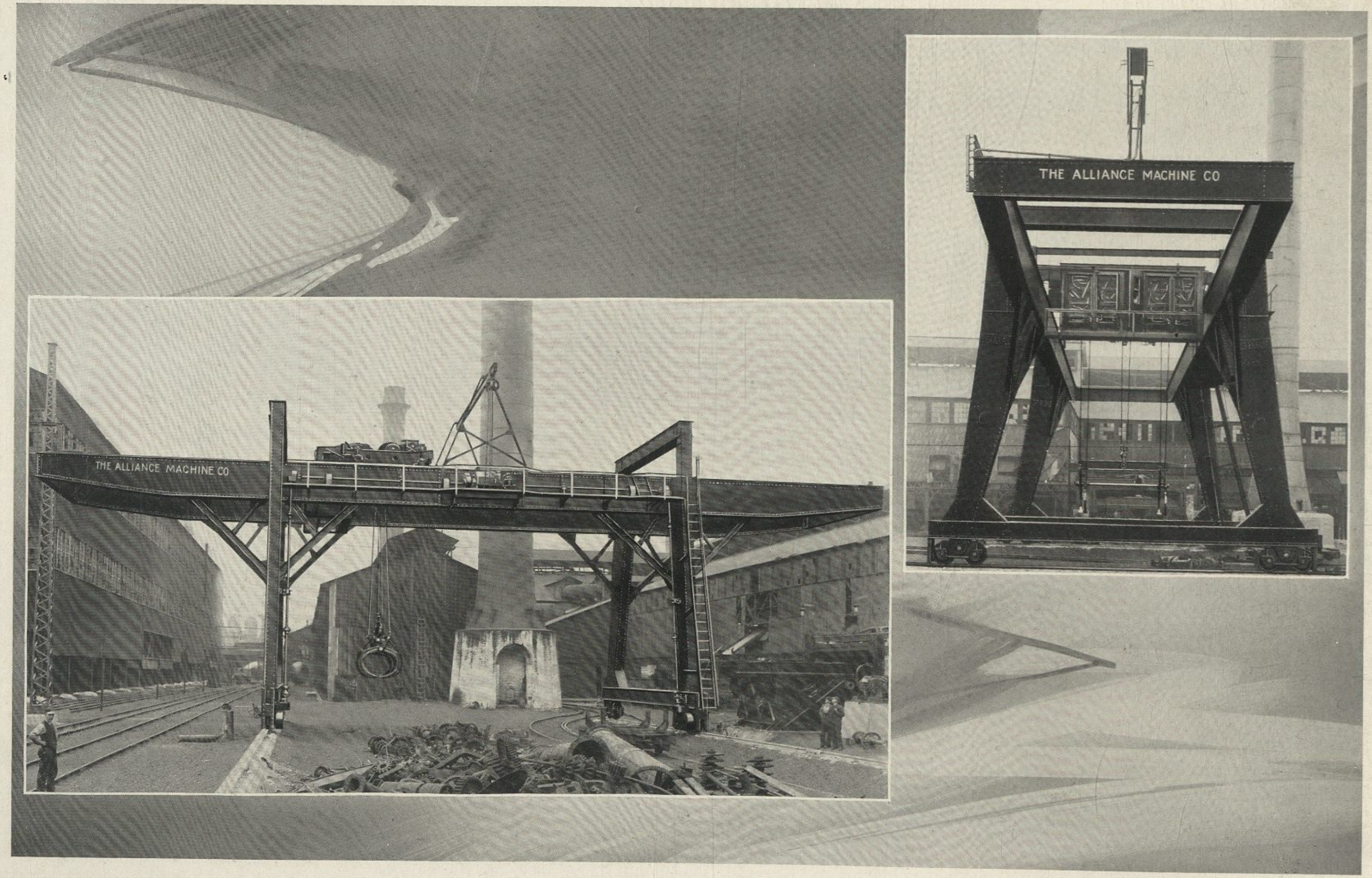
One and One-Half-Ton, Four-Motor, Patented Manipulator for Handling Tires with Pneumatically Operated Tongs

Built for Standard Steel Works, Burnham, Pa.

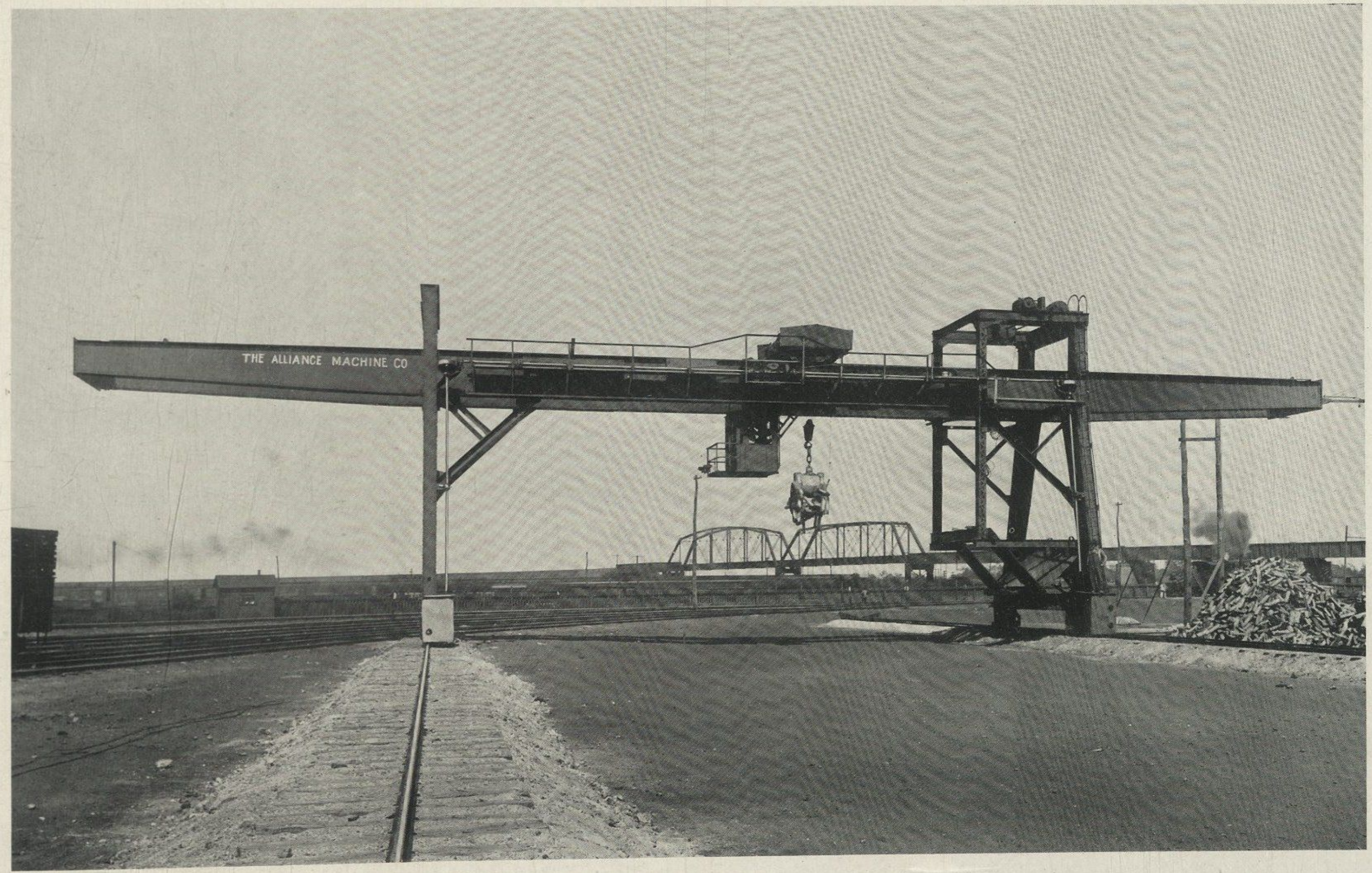

THE ALLIANCE MACHINE CO.
THE ALLIANCE MACHINE CO.
THE ALLIANCE MACHINE CO.

Forge Shop Manipulator

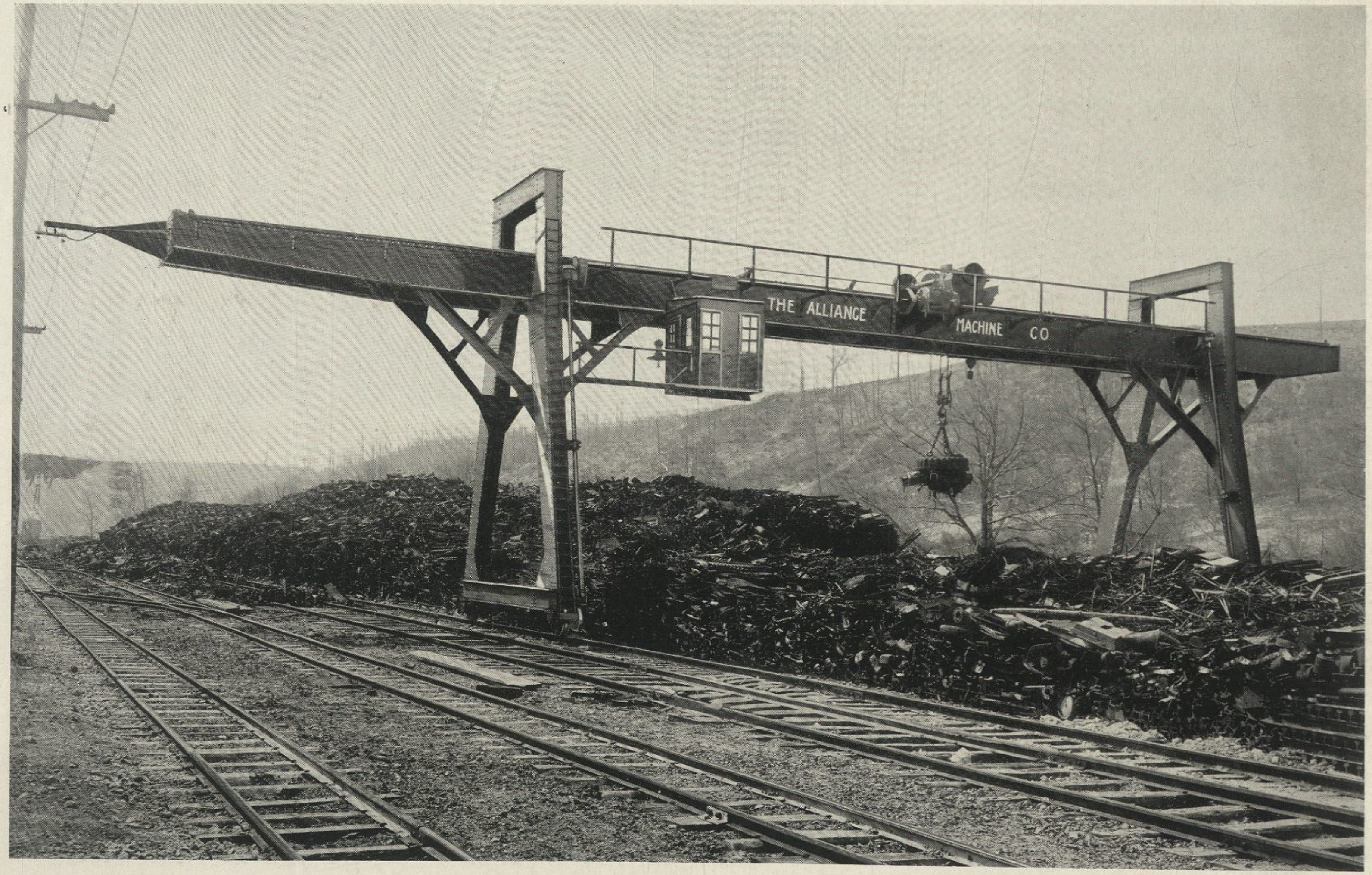
This machine and modifications of it lends itself to a wide range of application.


THE ALLIANCE MACHINE CO
THE ALLIANCE MACHINE CO

Ten-Ton Special Gantry Crane, Four-Motor Type, 46-Foot Span with 24-Foot and 25-Foot Cantilever Extensions
Operator's cage attached to trolley
Note—Specially arranged for handling blooms and for magnet service
Built for Maryland Steel Co., Sparrows Point, Md.



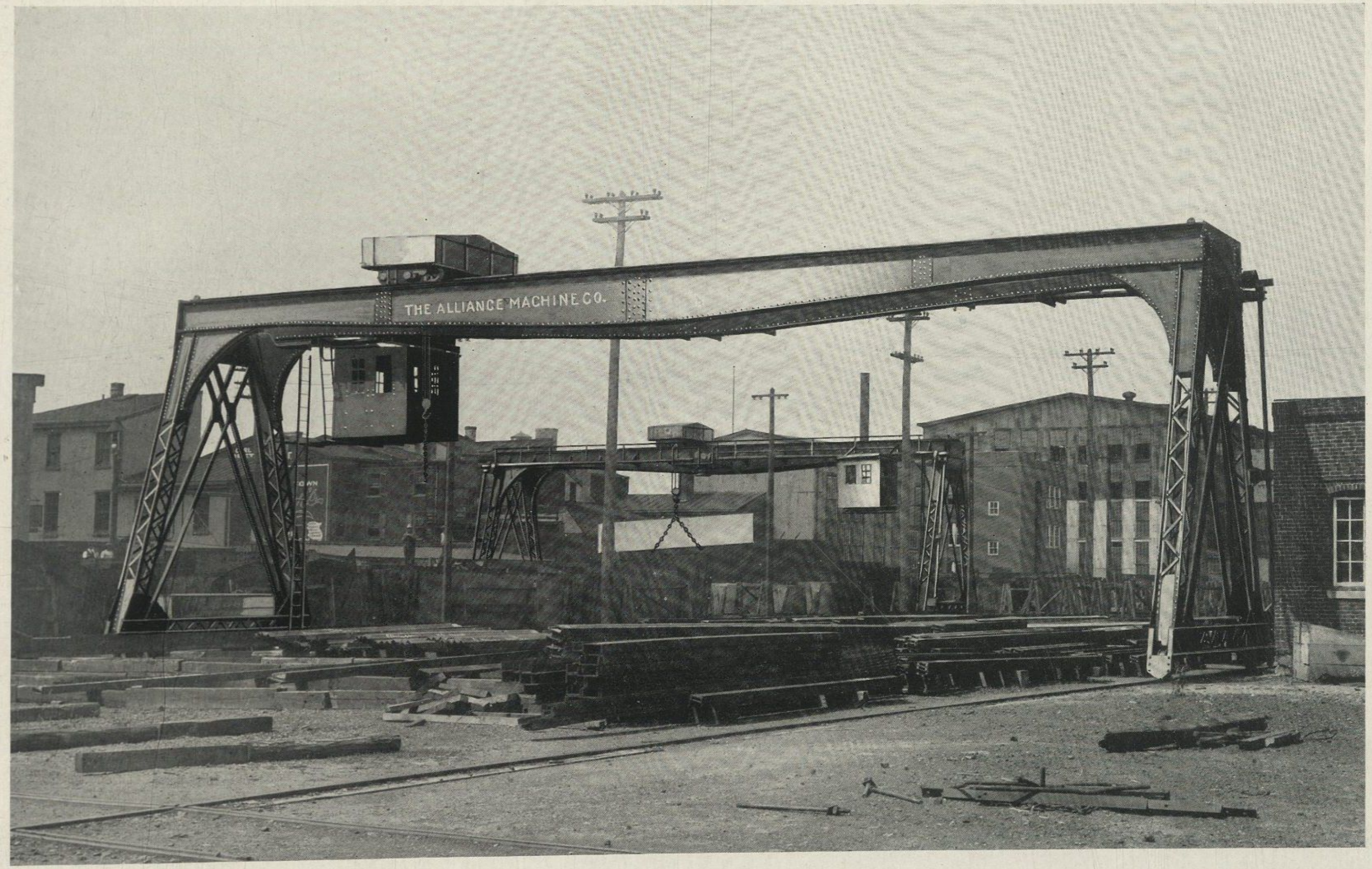
Fifteen-Ton, Four-Motor Gantry Crane—70-Foot Span—32-Foot Cantilever Extension Each End
Magnet service for handling pig iron
Loading end provided with tilting screen for cleaning pigs and loading into cars
In the yards of Rodgers Brown Iron Co., Buffalo, N. Y.



Double Cantilever Magnet Handling Crane

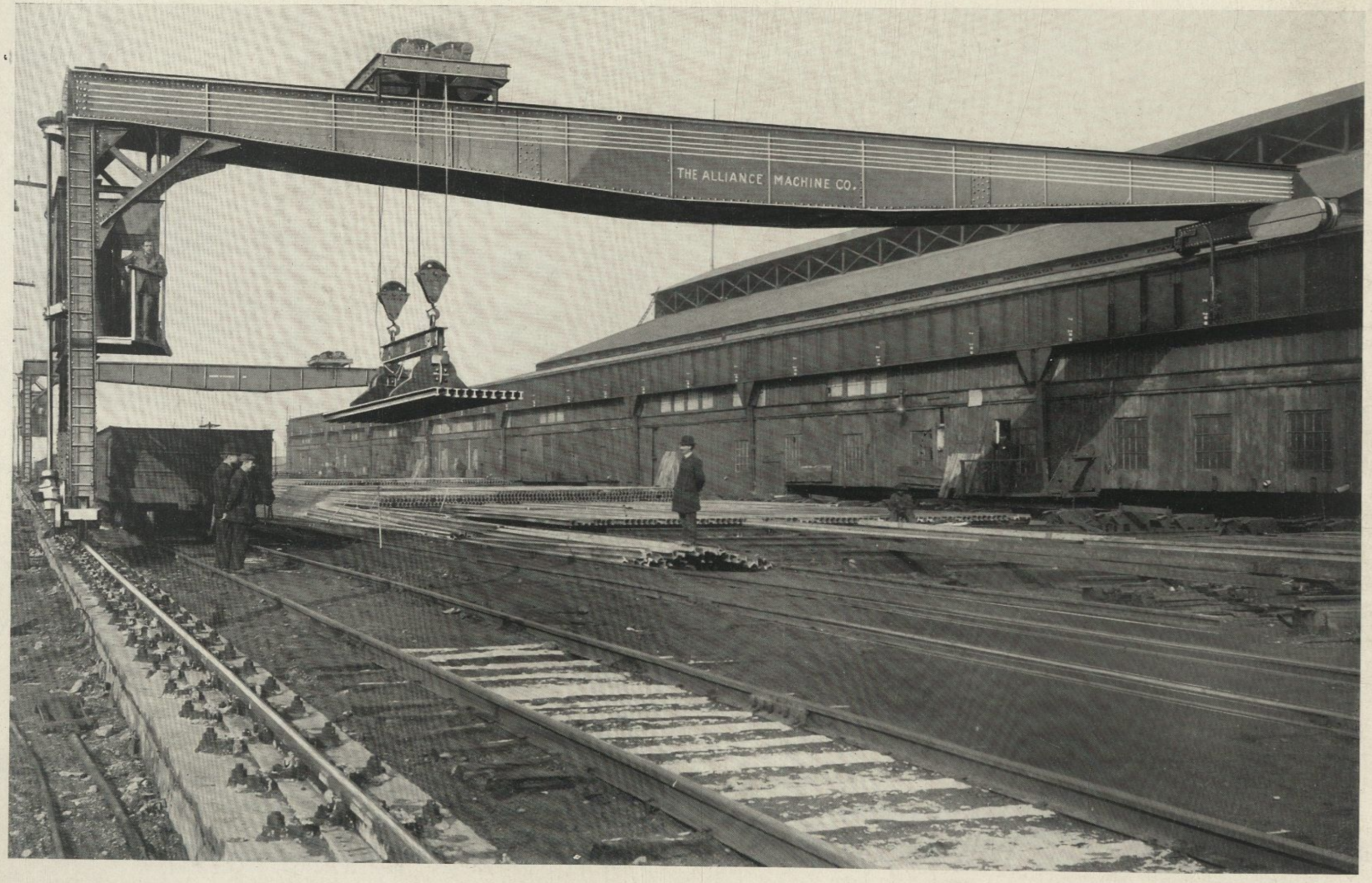
Designed and built for Worth Brothers Company

This type of crane is most admirably adapted to stock yards of steel works and manufacturing concerns generally. The stock can be piled in between the gantry legs, as the cantilever ends extend over the railroad tracks and permits of quickly loading or unloading cars. In the case of steel works, scrap can be unloaded directly from railroad cars into the charging boxes. Built in any capacity or span

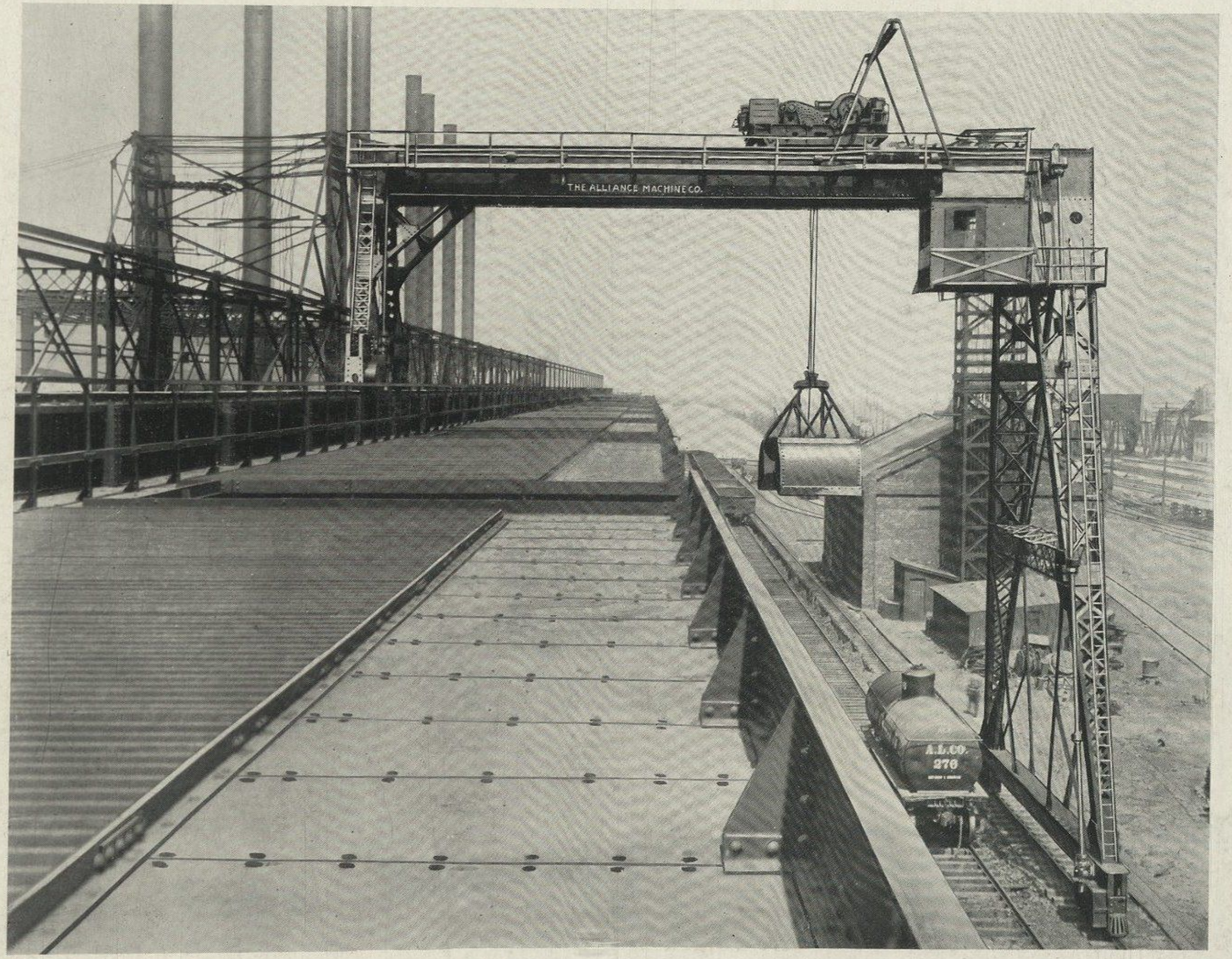

THE ALLIANCE MACHINE CO.

One of Three Ten-Ton, Three Motor Gantry Cranes—70-Foot Span

Installed in plant of Wm. Cramp & Sons Ship & Engine Building Co., Philadelphia, Pa.

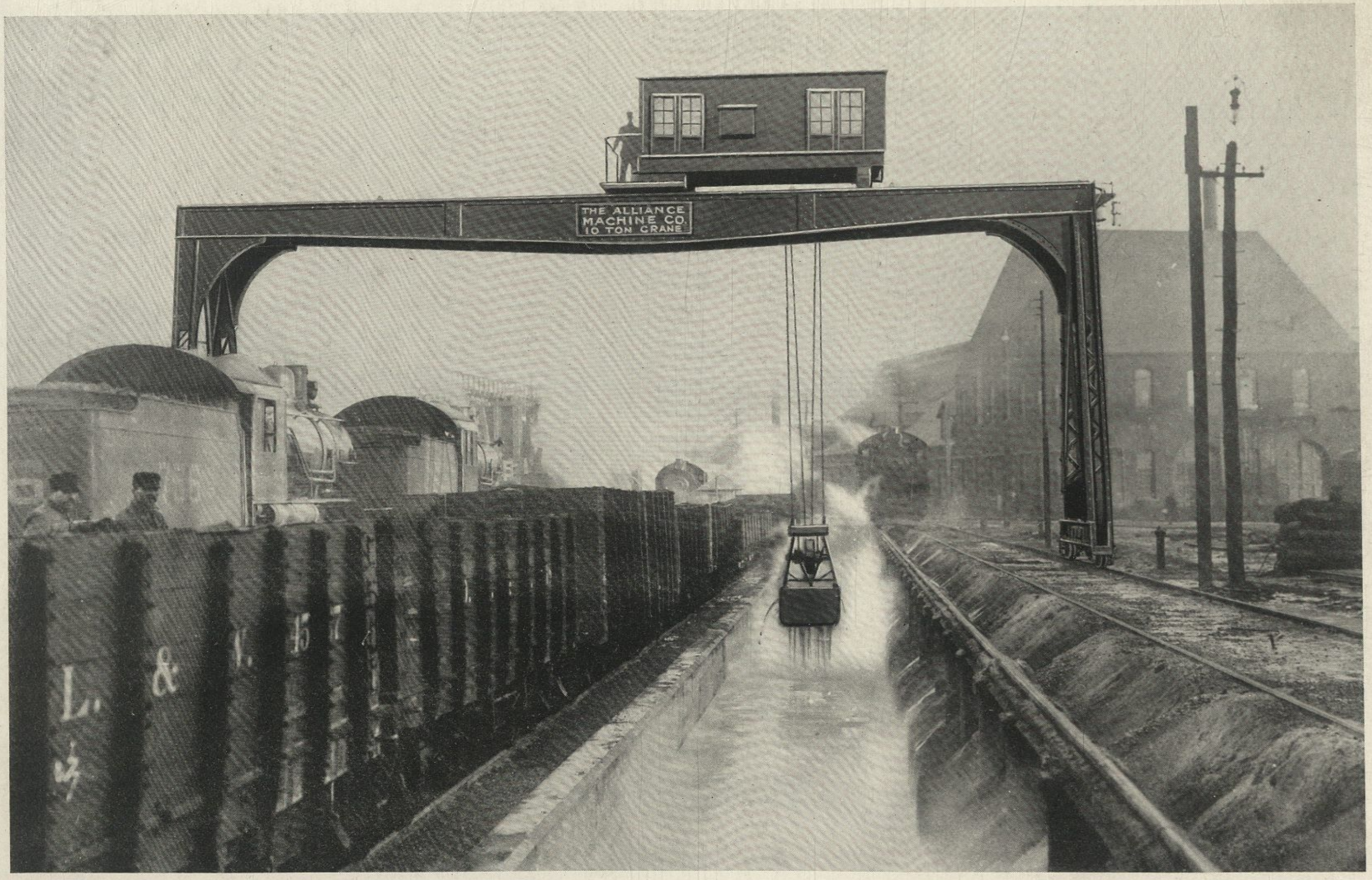

THE ALLIANCE MACHINE CO.

Two Twenty-Ton, Three-Motor, Single Leg, Magnet, Rail-Handling Gantry Cranes—76-Foot 9-Inch Span
Maryland Steel Co., Sparrows Point, Md.


THE ALLIANCE MACHINE CO.
A.L.CO.
276

Six-Ton, Four-Motor, Single Leg Gantry Crane—53-Foot 9-Inch Span

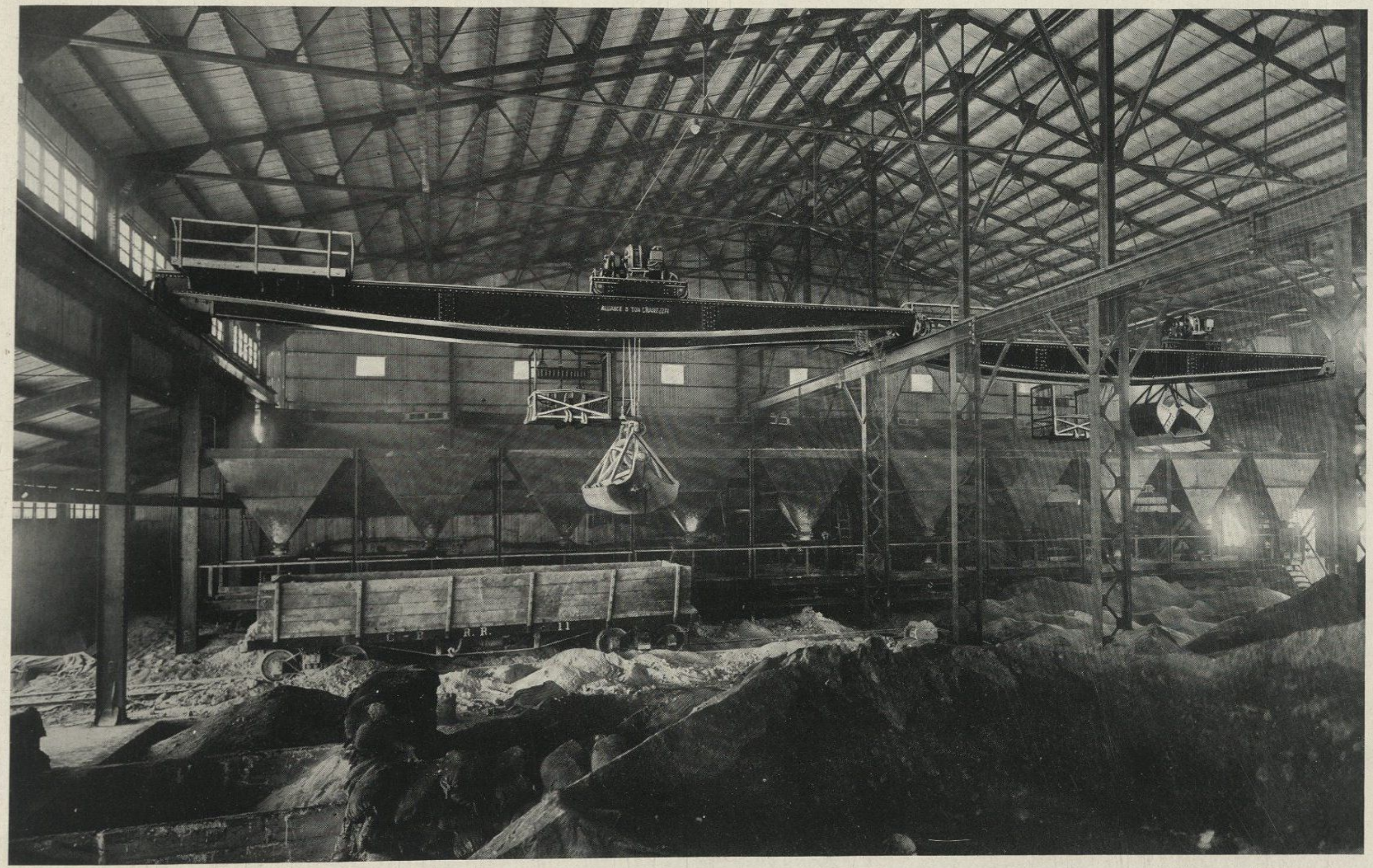
Trolley provided with two hoists, one for magnet and one for bucket
Installed in Open Hearth Yard Inland Steel Co.
for handling pigs and dolomite


THE ALLIANCE
MACHINE CO.
10 TON CRANE

Ten-Ton Electric Bucket Handling Crane, with Alternating Current Equipment

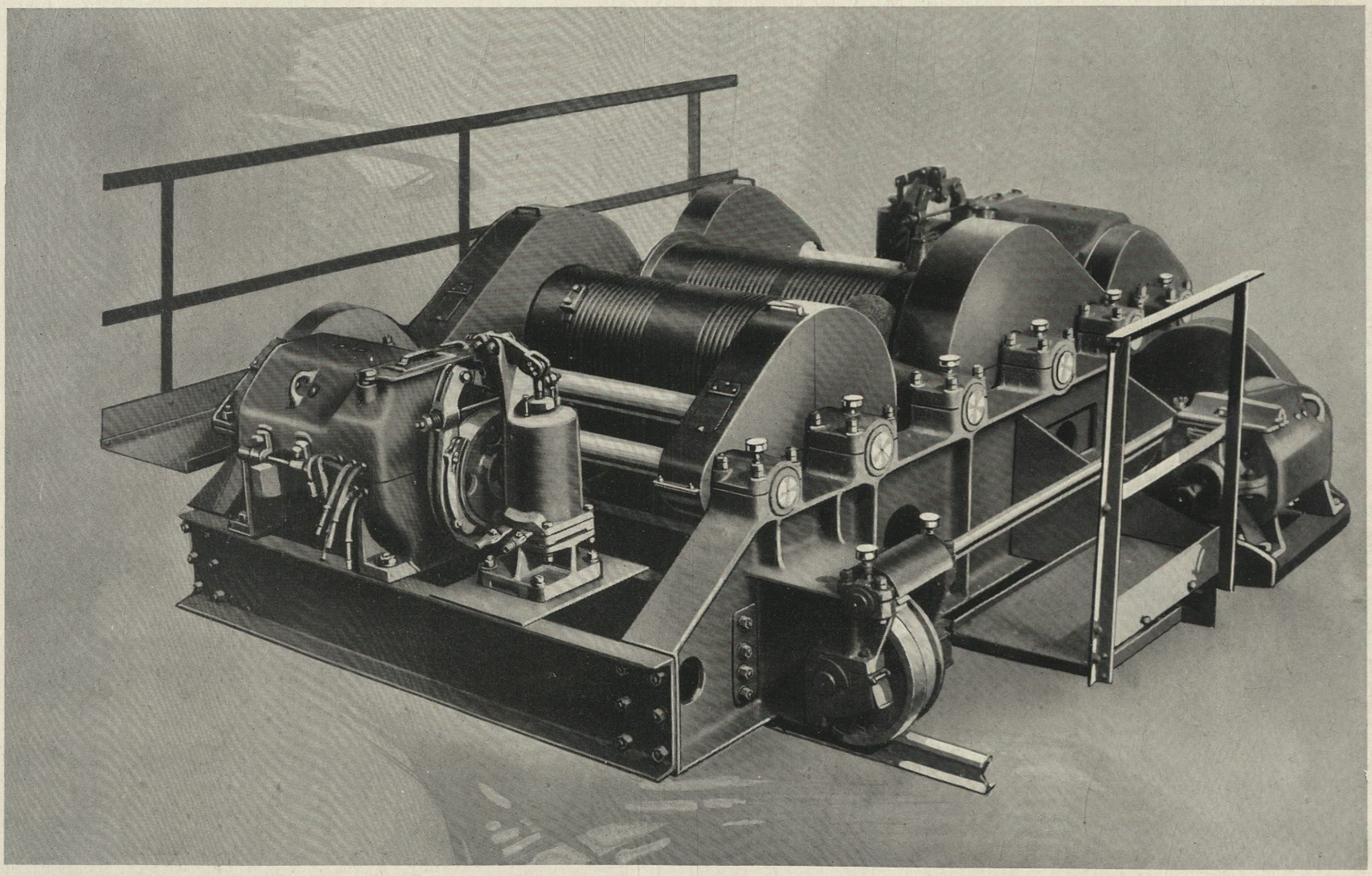
Designed and built for the D. L. & W. R. R. Co., Scranton, Pa.

This crane is arranged to handle a clam shell bucket for removing ashes from ash pits in railroad yards.
It is equally applicable to other service.

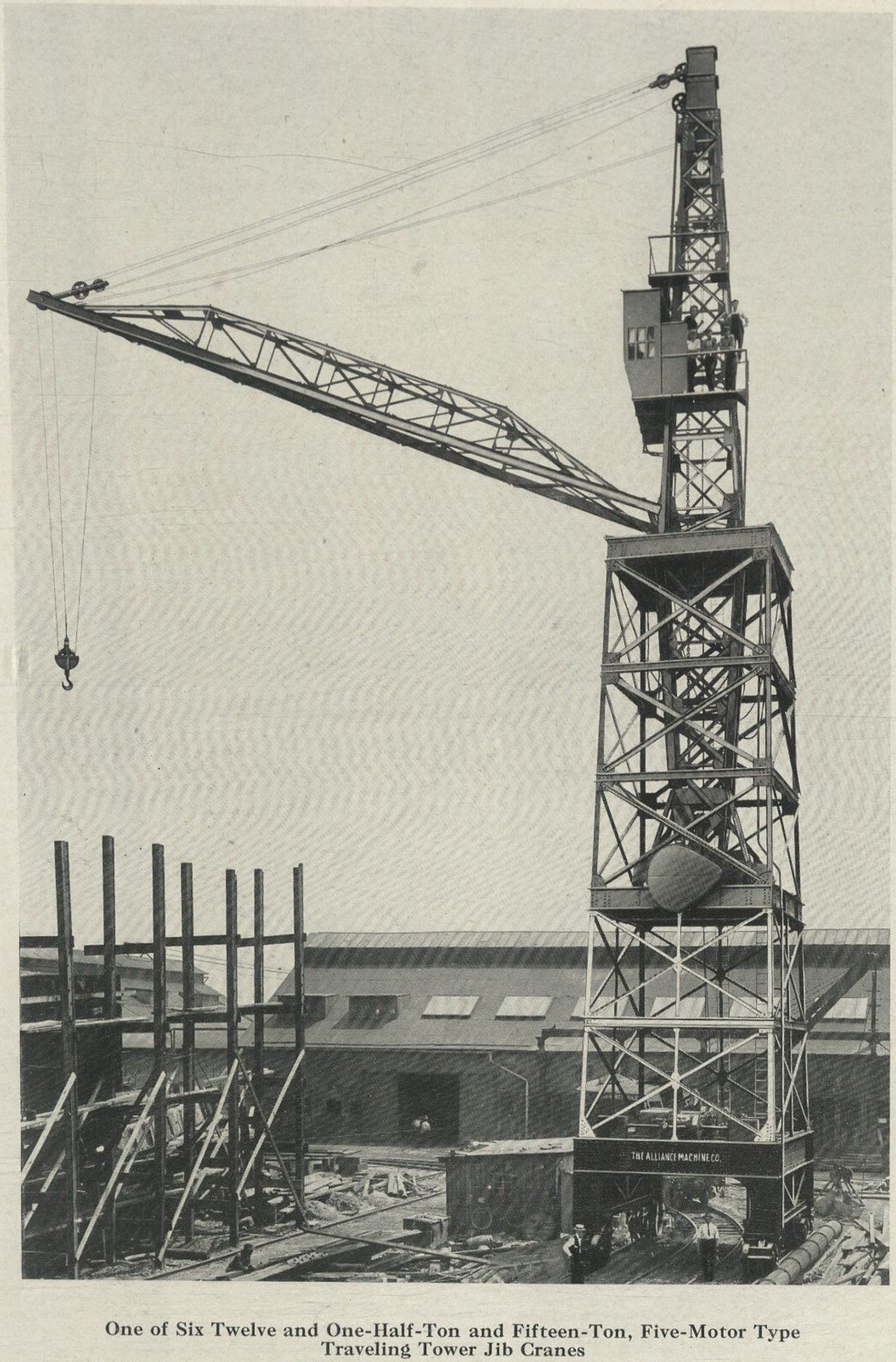


Two Eight-Ton Grab Bucket Cranes—62-Foot 11½-Inch Span

For handling fertilizer in the plant of Swift & Company, Curtis Bay (Baltimore), Md.



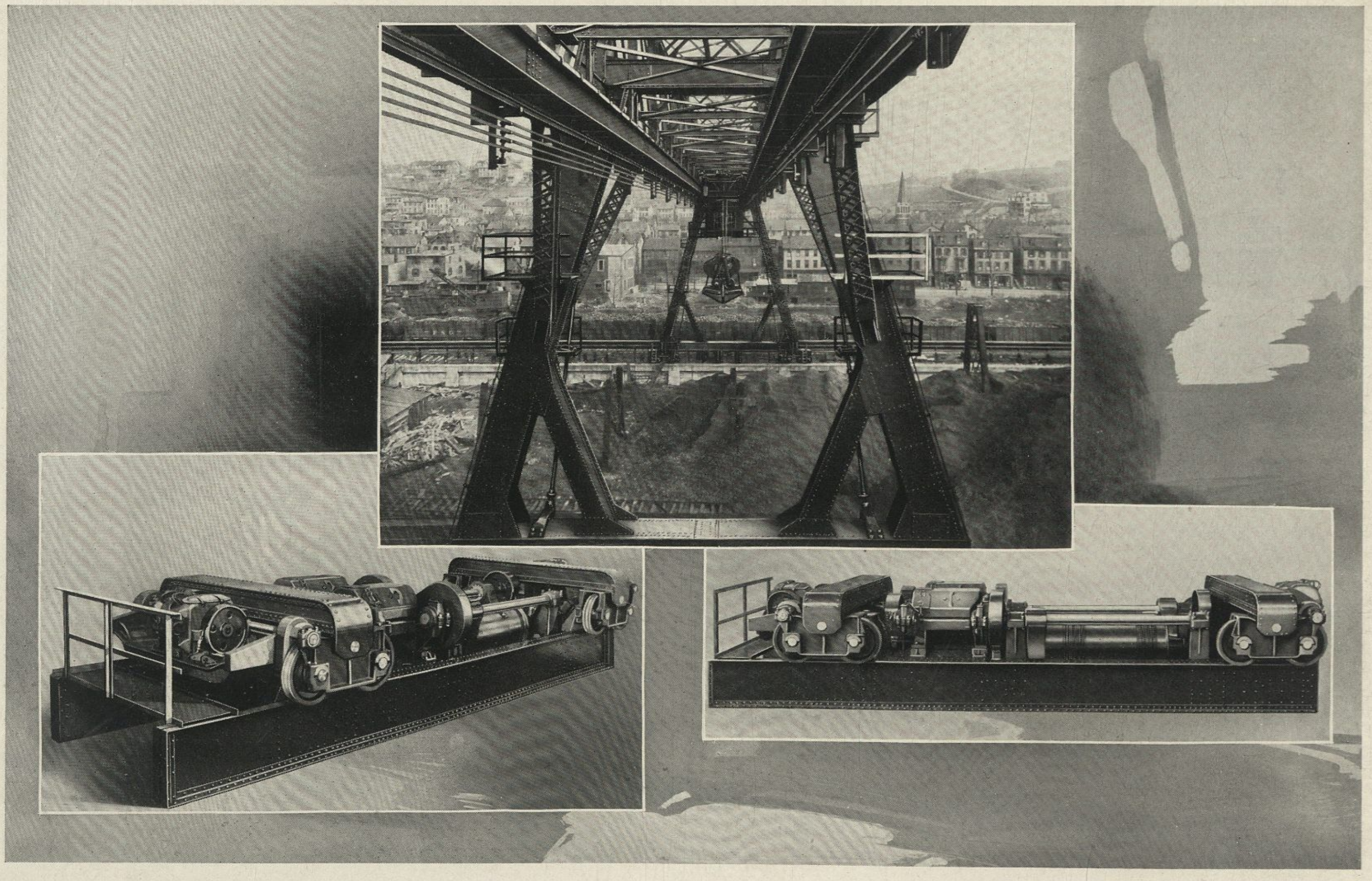
Shop View of a Typical Trolley Used on Grab Bucket Cranes of Mill Type Construction



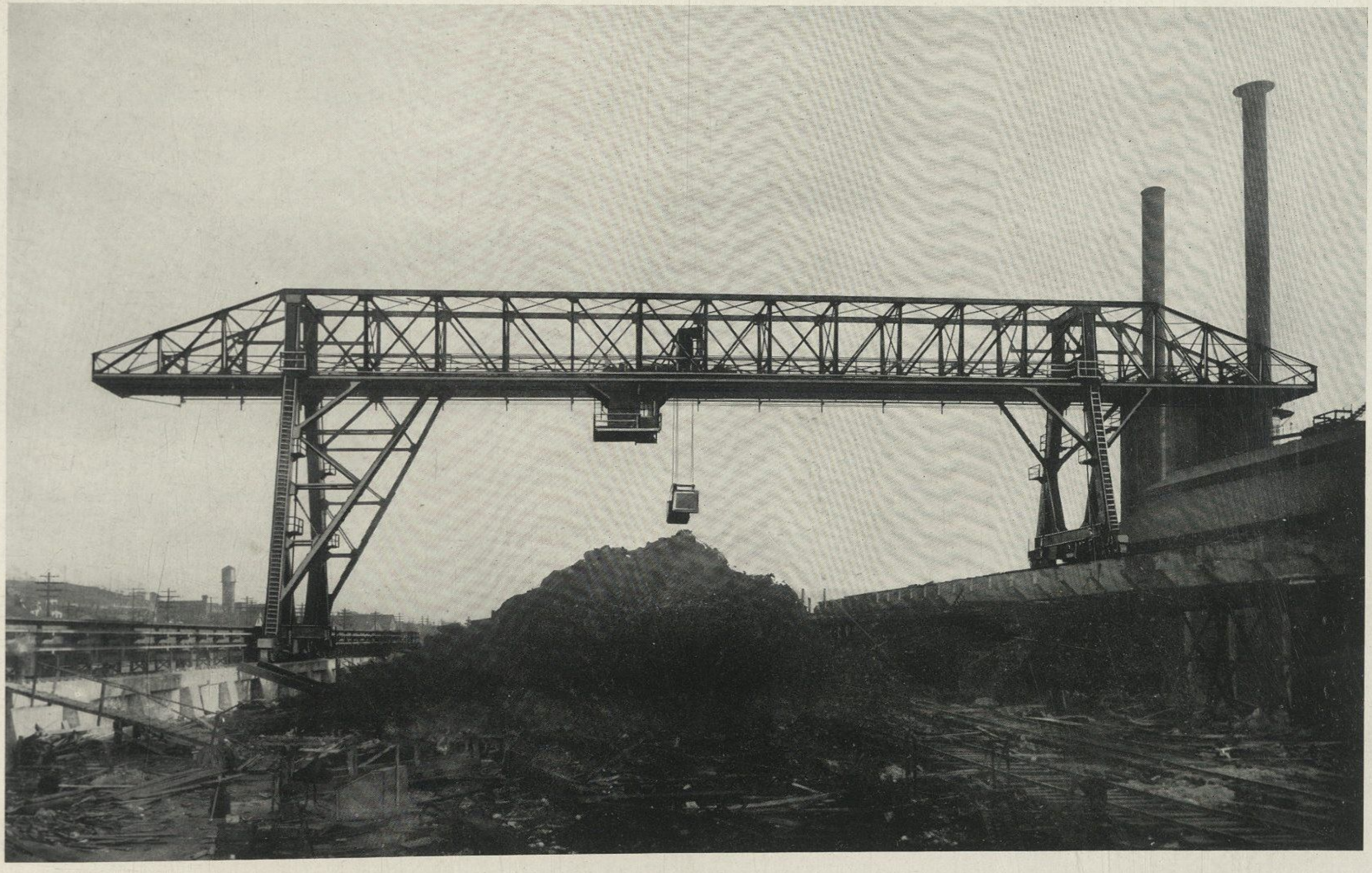
One of Six Twelve and One-Half-Ton and Fifteen-Ton, Five-Motor Type Traveling Tower Jib Cranes

Total height of tower 125 feet and maximum radius of jib 60 feet. Designed to serve two vessels on separate ways

Installed in the Marine Department, Maryland Steel Co., Sparrows Point, Md.

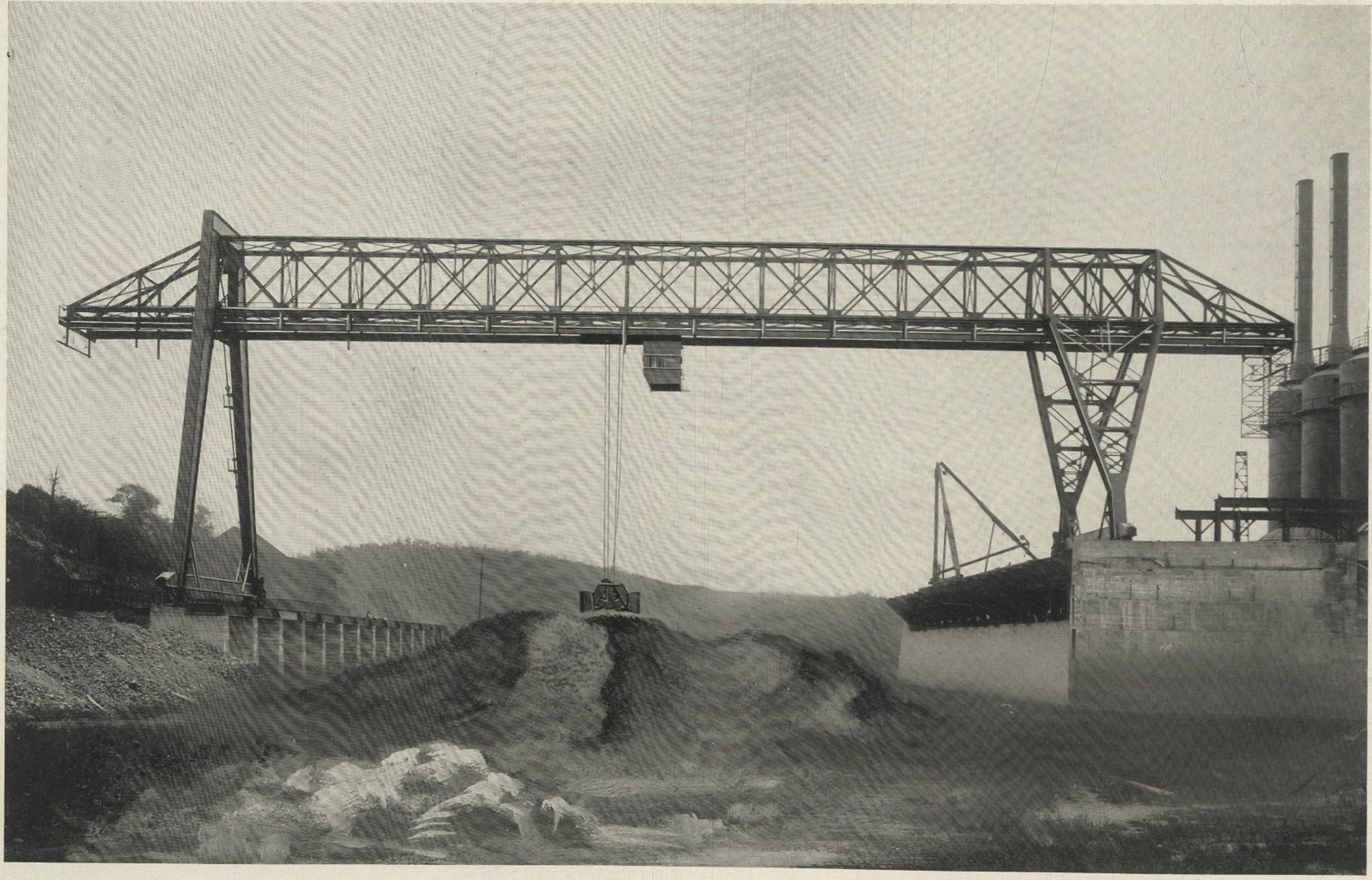


Seven and One-Half-Ton Ore Bridge. End View and Two Views of Trolley
(See Page 55)

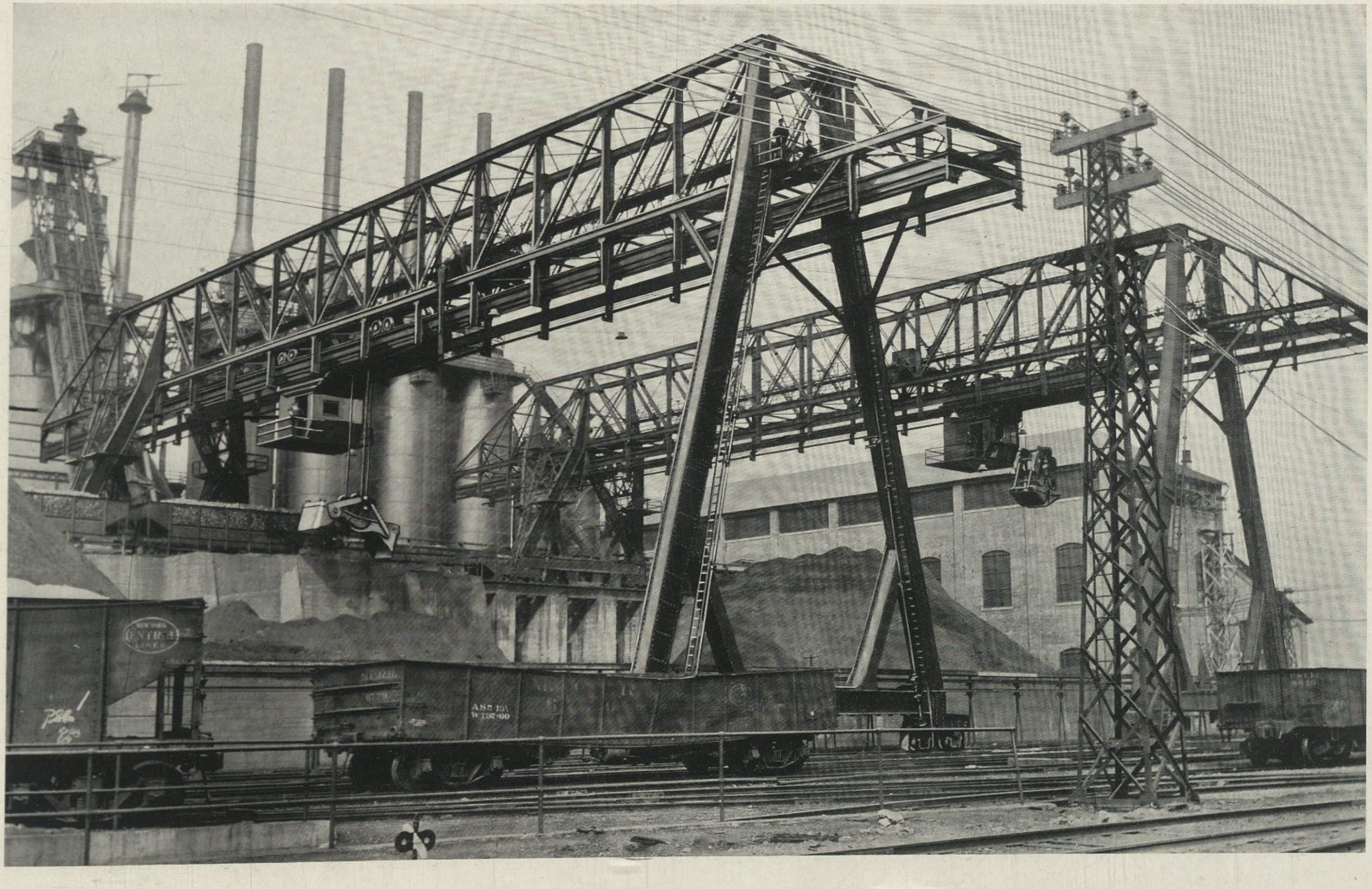


Seven and One-Half-Ton, Eight-Motor Type Ore Bridge—167-Foot Span

Cantilever extensions of respectively 39 feet 3½ inches and 52 feet. Total overall, 258 feet 3½ inches
Installed in the plant of the Pennsylvania Steel Co., Steelton, Pa.
(See also Page 54)

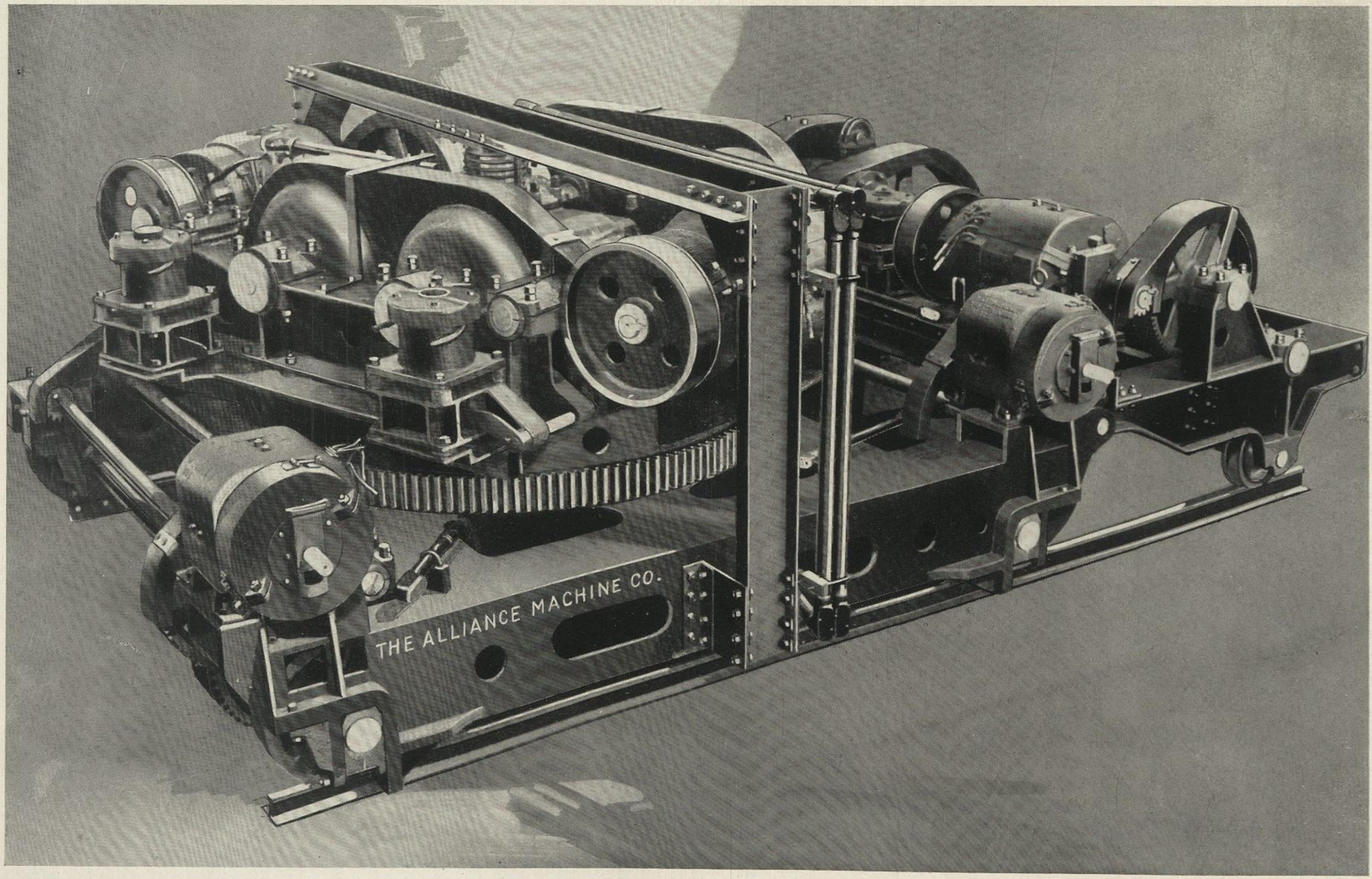


Six-Ton, Six-Motor Type Ore Bridge—184-Foot 3-Inch Span
Overall length of bridge, 256 feet 0¾ inches
Installed at Worth Bros., Coatesville, Pa.



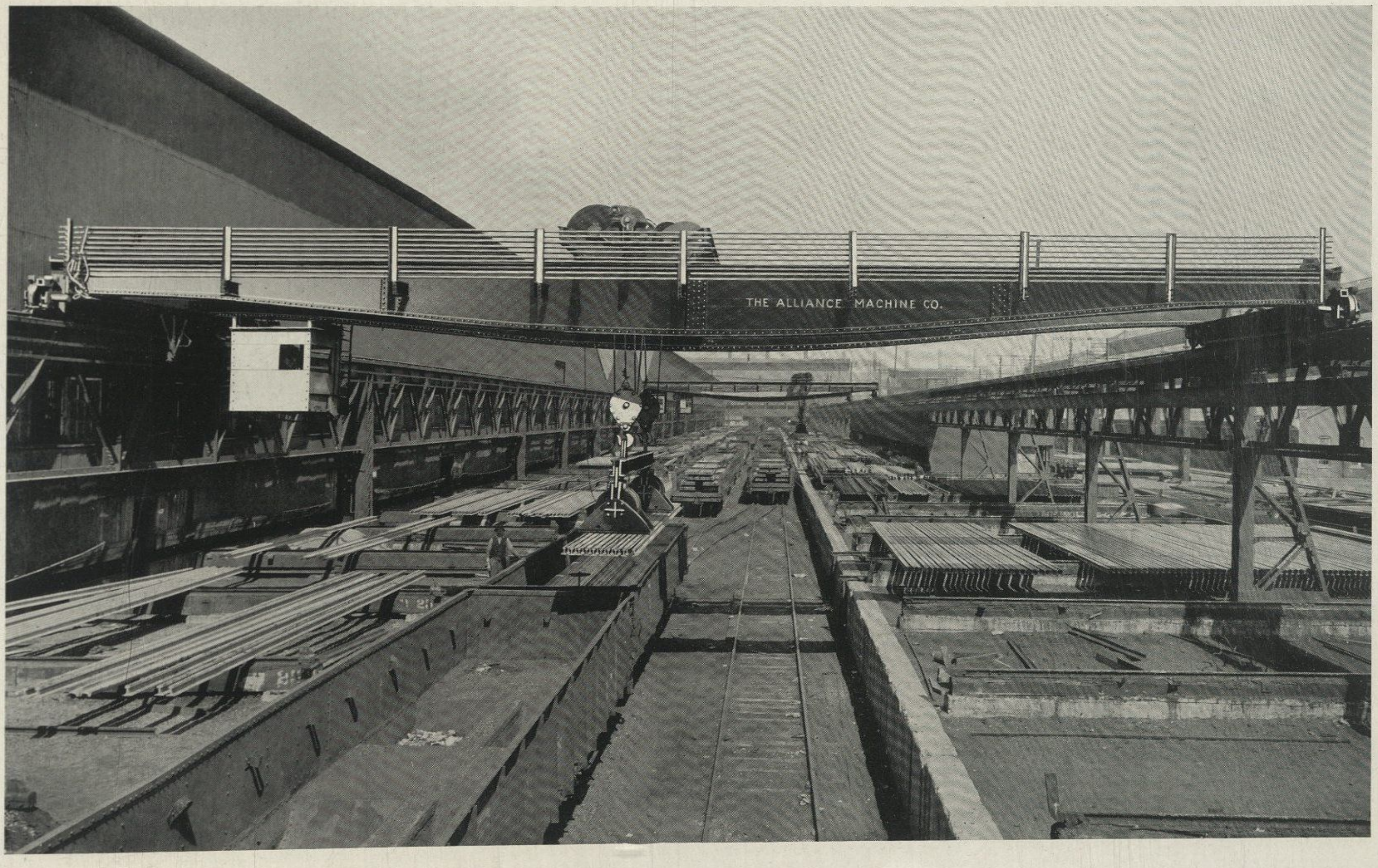
Two Seven and One-Half-Ton, Nine-Motor Type Ore Bridges

Each 162-foot span, with cantilever extensions of respectively 27 feet and 41 feet. Total overall, 230 feet
These bridges are the fastest of their kind in operation anywhere
Installed in the plant of Pittsburg Steel Co., Monessen, Pa.

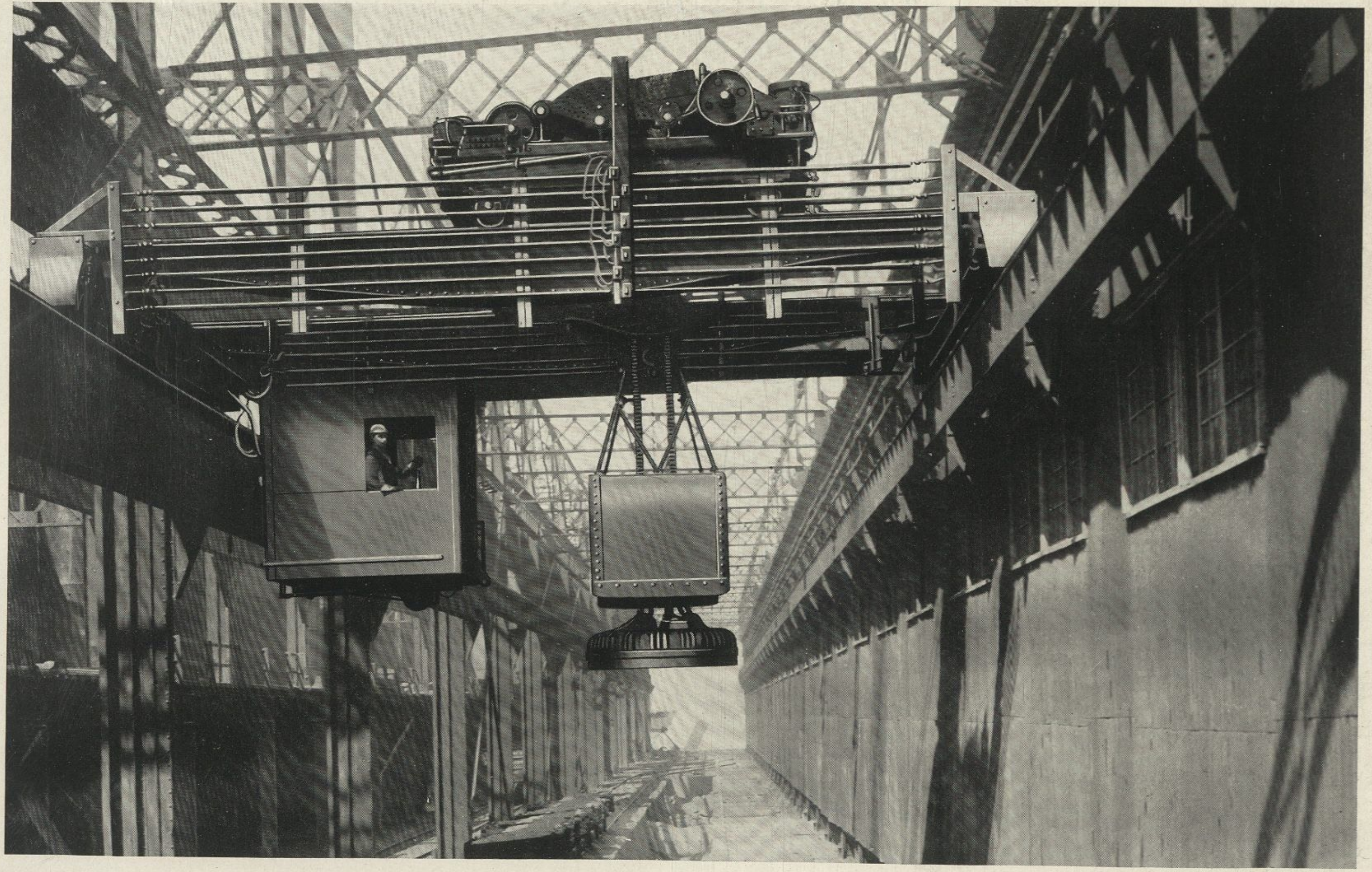


Trolley Used on Forty-Ton Forge Crane

For rotating forge blanks under hammer and arranged with Trailer Auxiliary Hoist of 10-ton capacity
Installed in the Atha Plant, Crucible Steel Co., Atha, N. J.

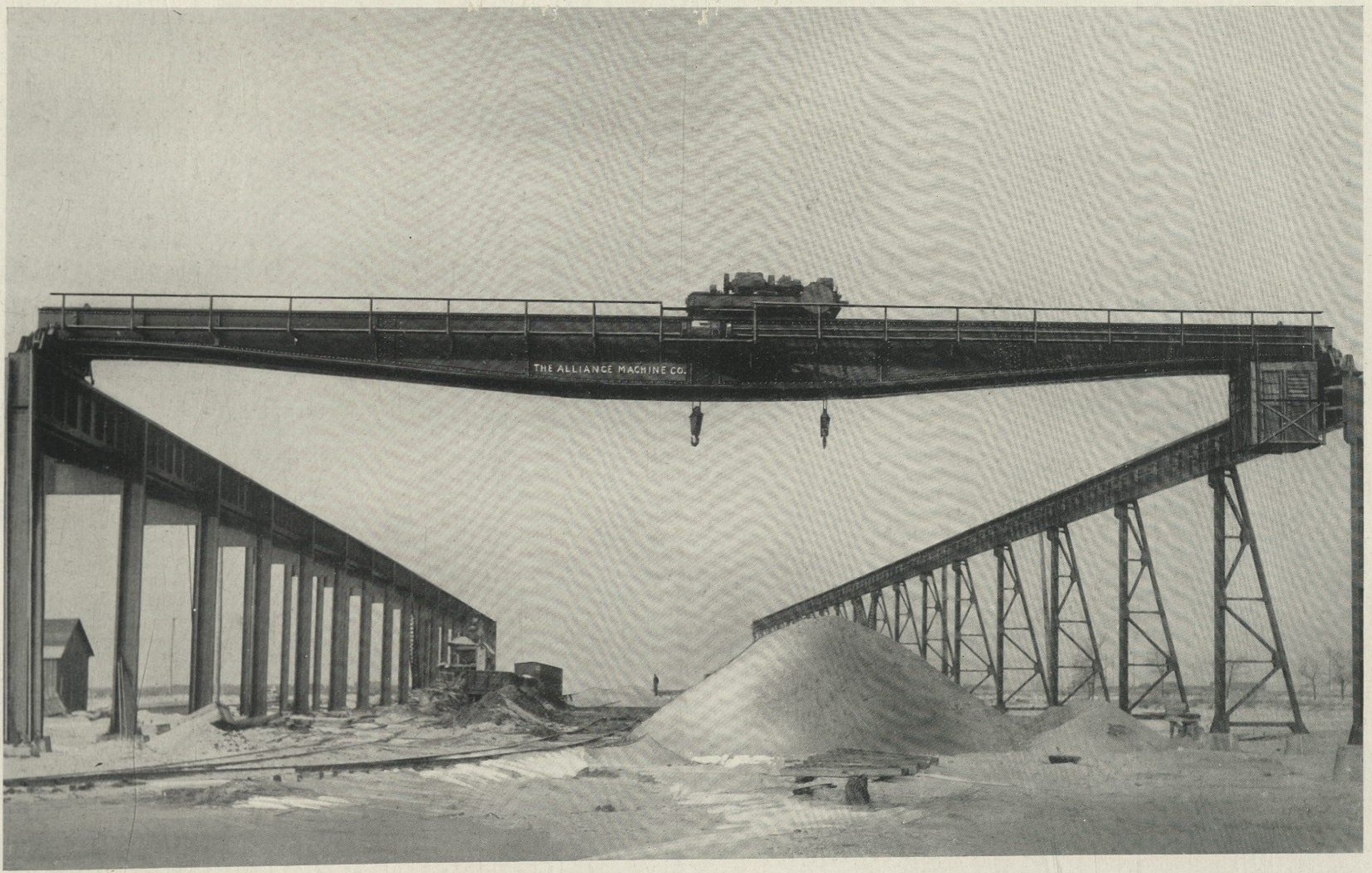

THE ALLIANCE MACHINE CO.

Two Twenty-Ton Magnet Rail Handling Cranes—102-Foot Span
Furnished to the Indiana Steel Co., Gary, Ind.

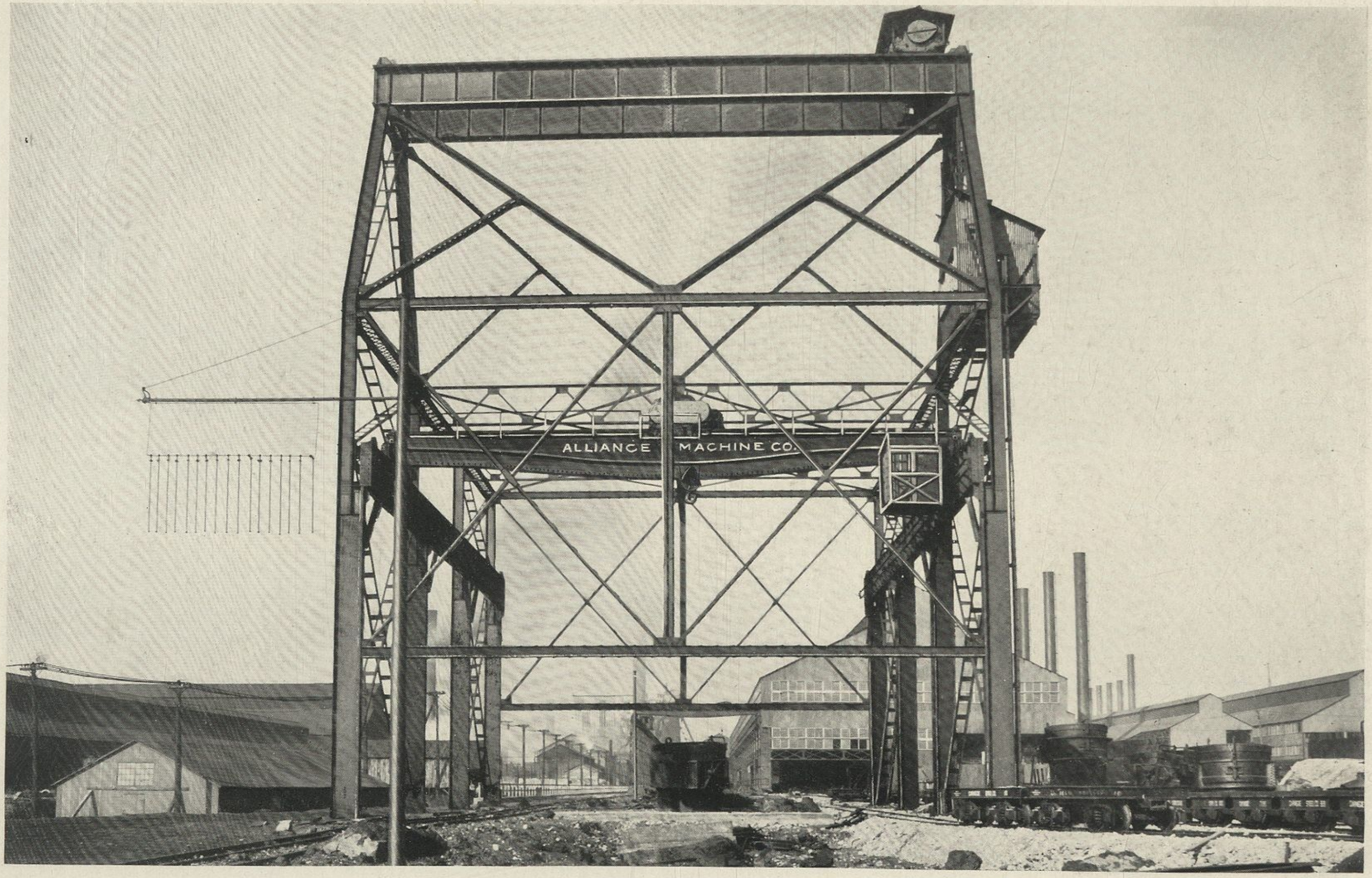


Ten-Ton, Five-Motor Crane—27-Foot 6-Inch Span

With a trolley having two independent hoists, one for grab bucket and the other for magnet
Used for handling pigs and dolomite in the Open Hearth Yard of the Inland Steel Co.


THE ALLIANCE MACHINE CO.

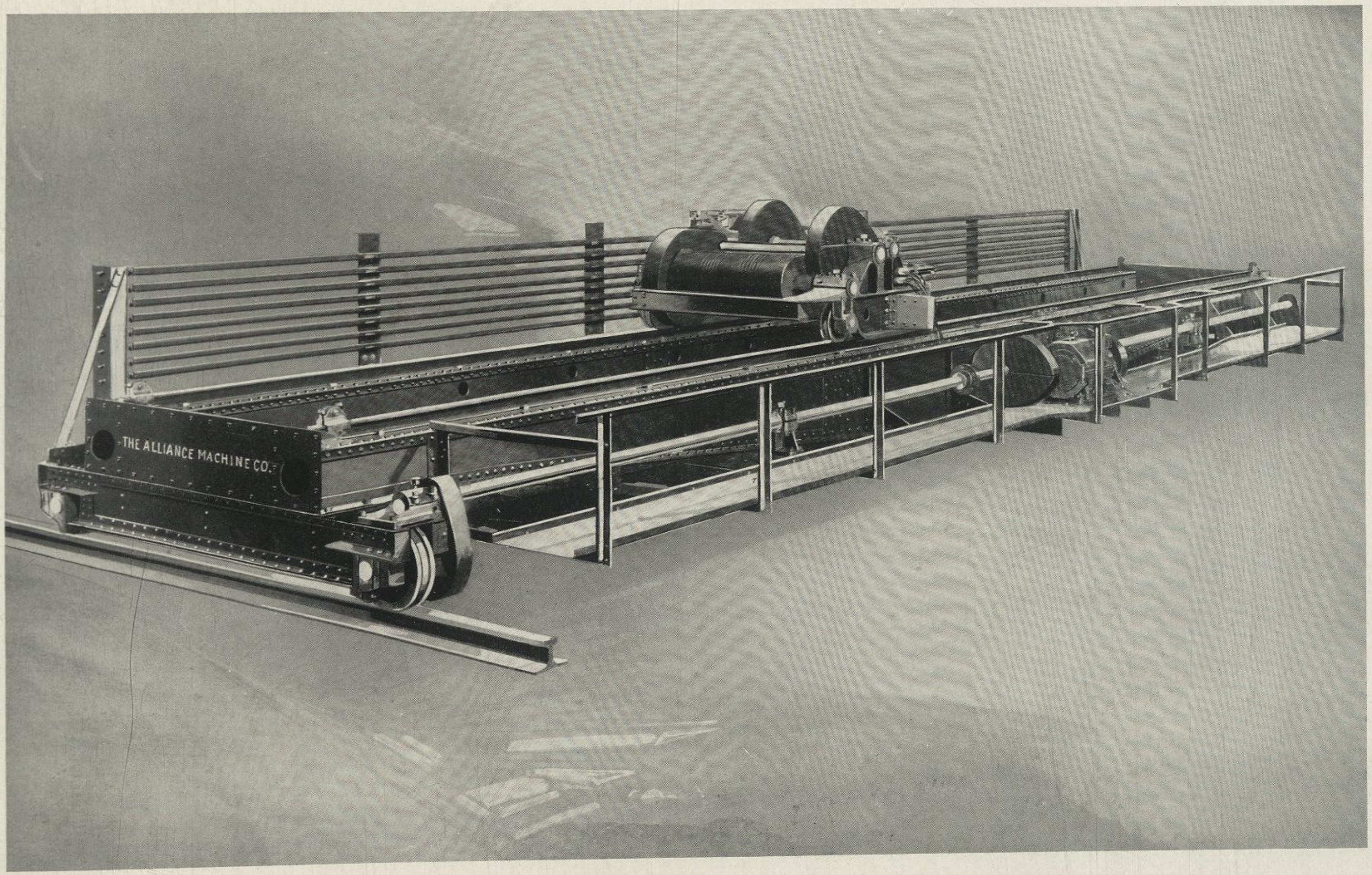
Twenty-Ton, Three-Motor, 102-Foot Span Crane with Two Points of Lift Parallel with Bridge Girders
Indiana Steel Co., Gary, Ind.



This Cut Shows a Standard Twenty-Five-Ton Crane and an Elevated Ten-Ton Trolley

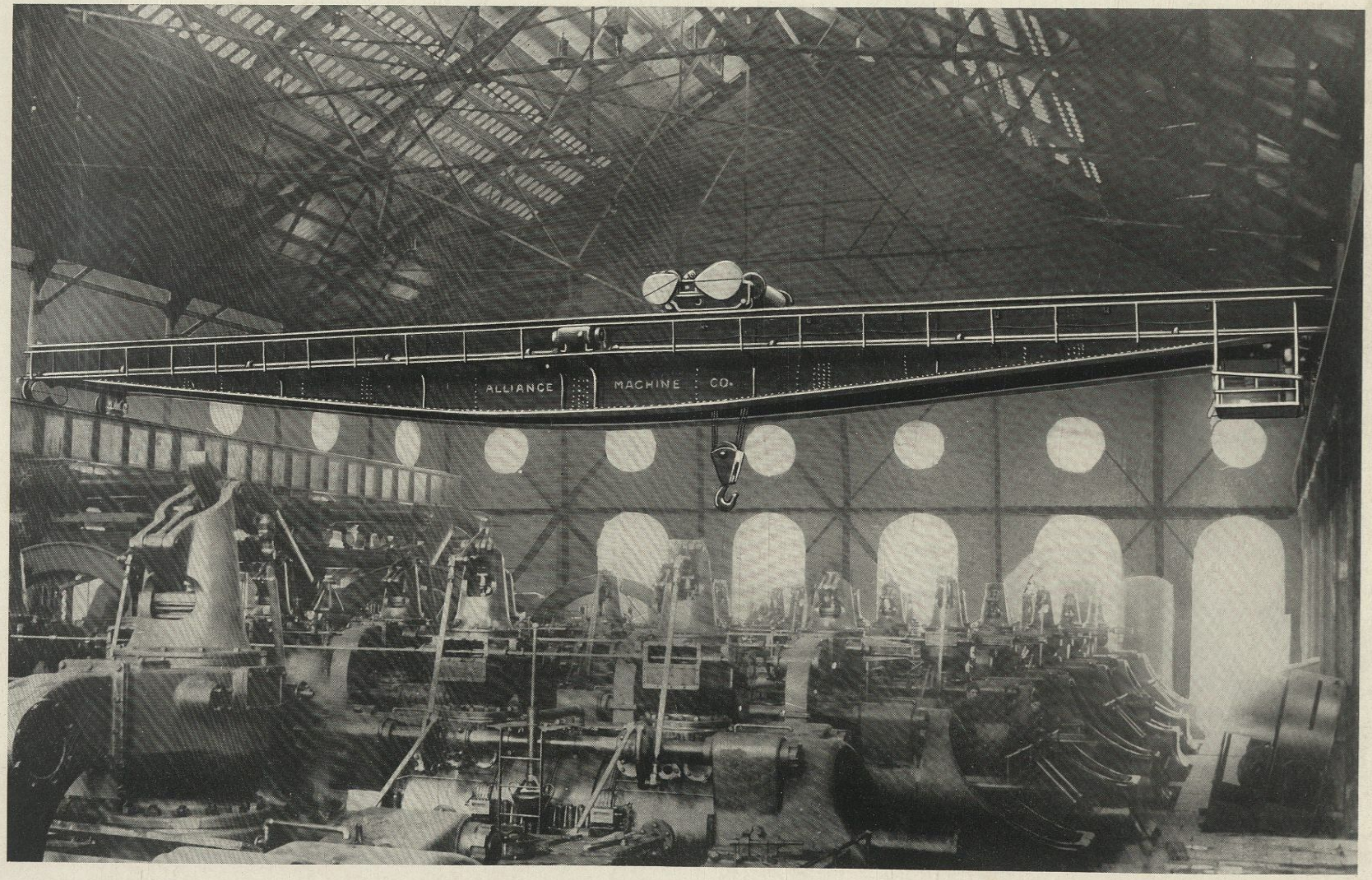
All carried on one superstructure. Latest type of construction for a skull breaker plant. The crane handles the heavy skulls, while the elevated trolley raises the ten-ton ball for breaking the skulls

Designed and built for the Carnegie Steel Company—Ohio Works

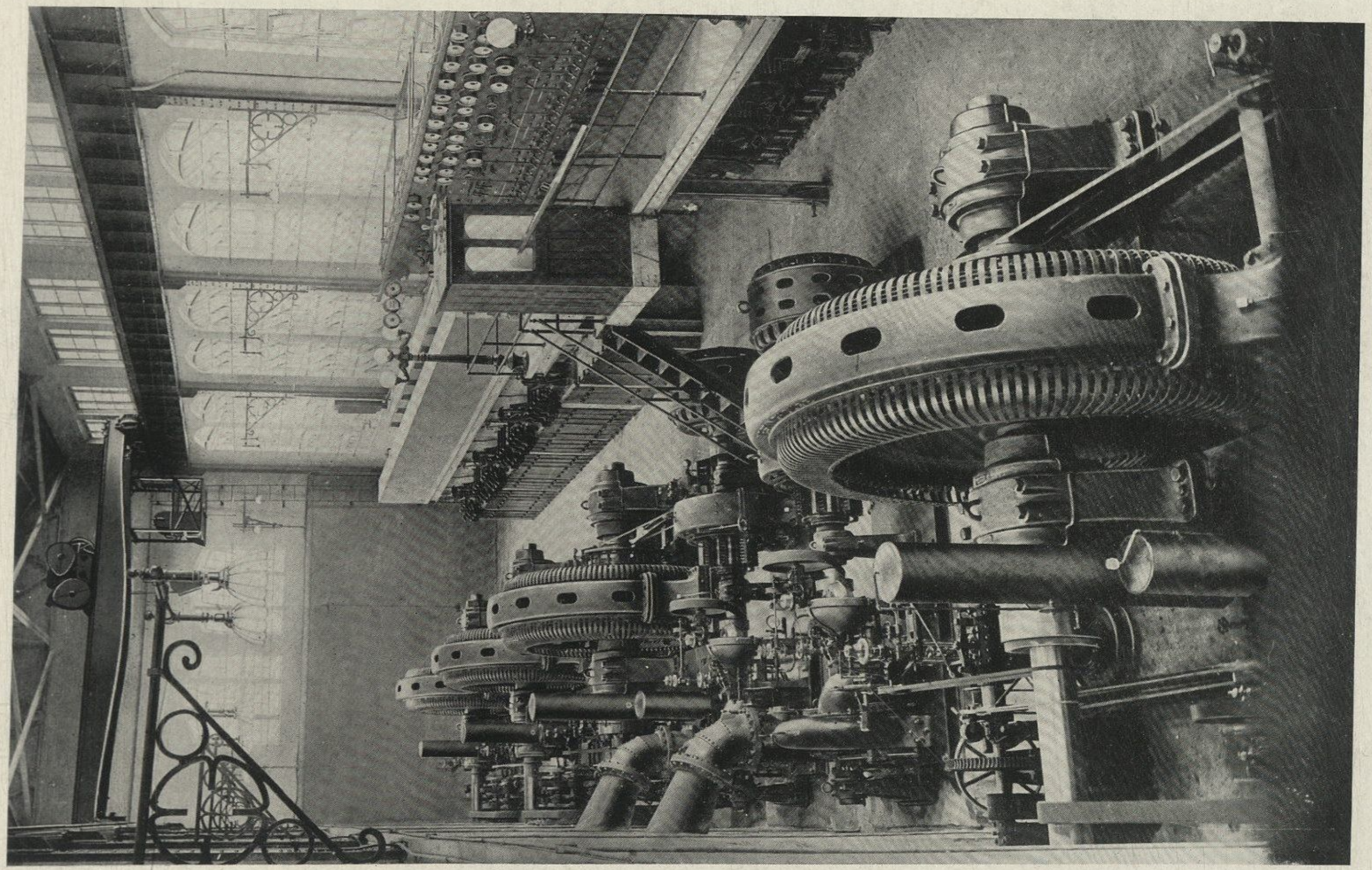

THE ALLIANCE MACHINE CO.

Standard Ten-Ton, Three-Motor Traveling Crane with Structural End Carriage and Bar Current Conductors

Furnished in all capacities and spans

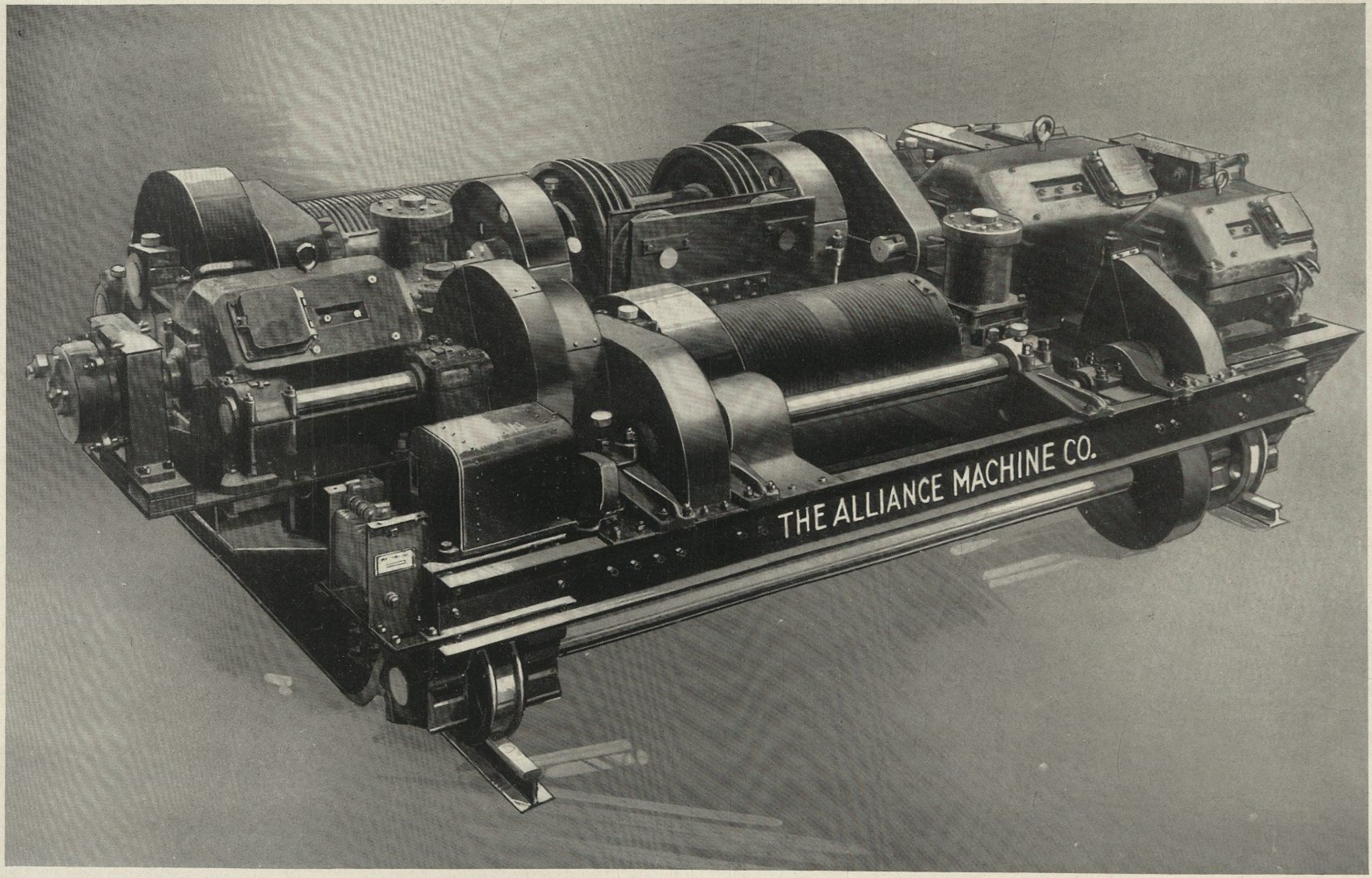

ALLIANCE MACHINE CO.

Fifty-Ton, Three-Motor Crane—121-Foot 2-Inch Span
Built for the Carnegie Steel Company—Ohio Works



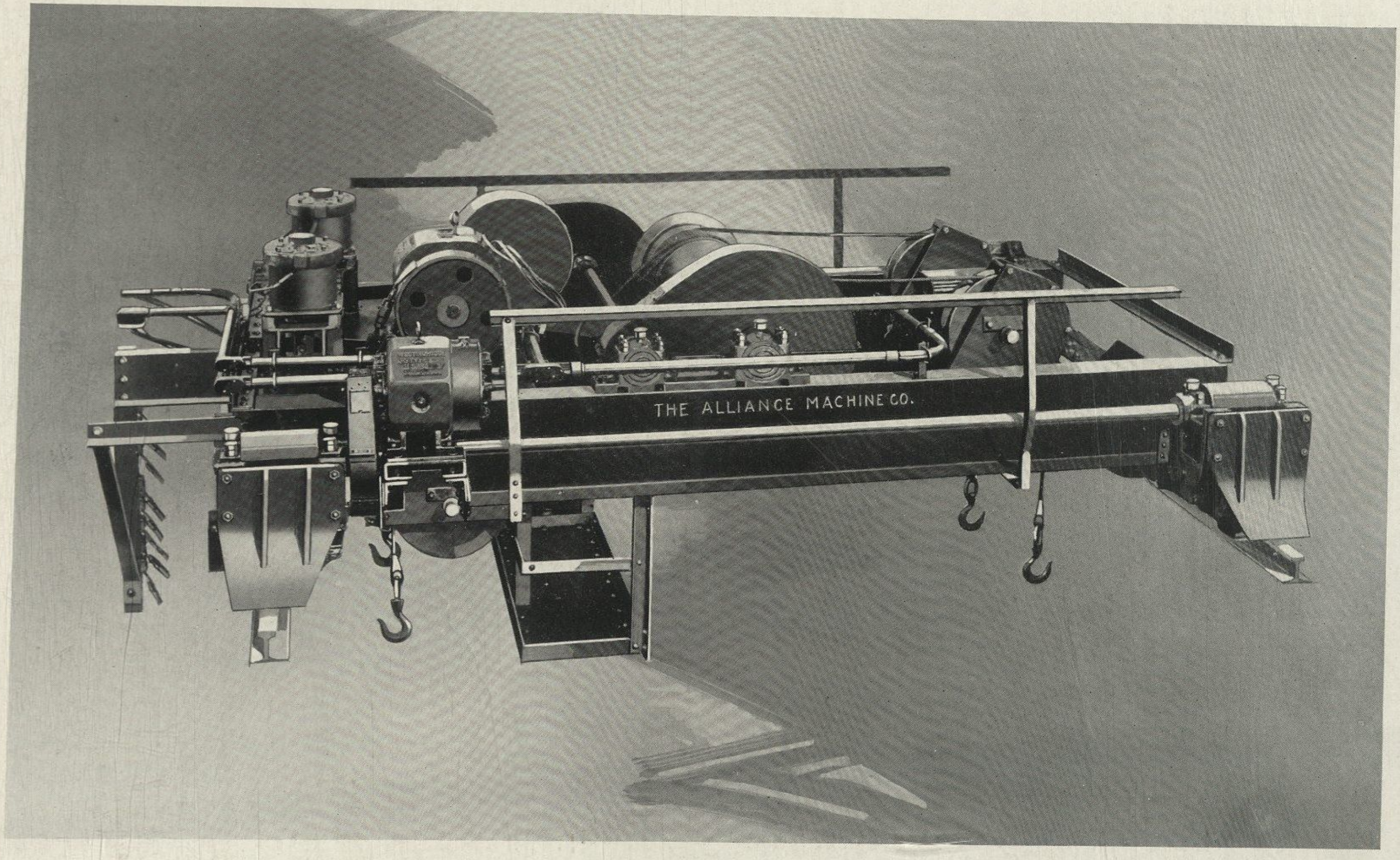
Twenty-Five-Ton, Three-Motor Crane—33-Foot 8½-Inch Span

Eastern Tennessee Power Co., Ocoee, Tenn.



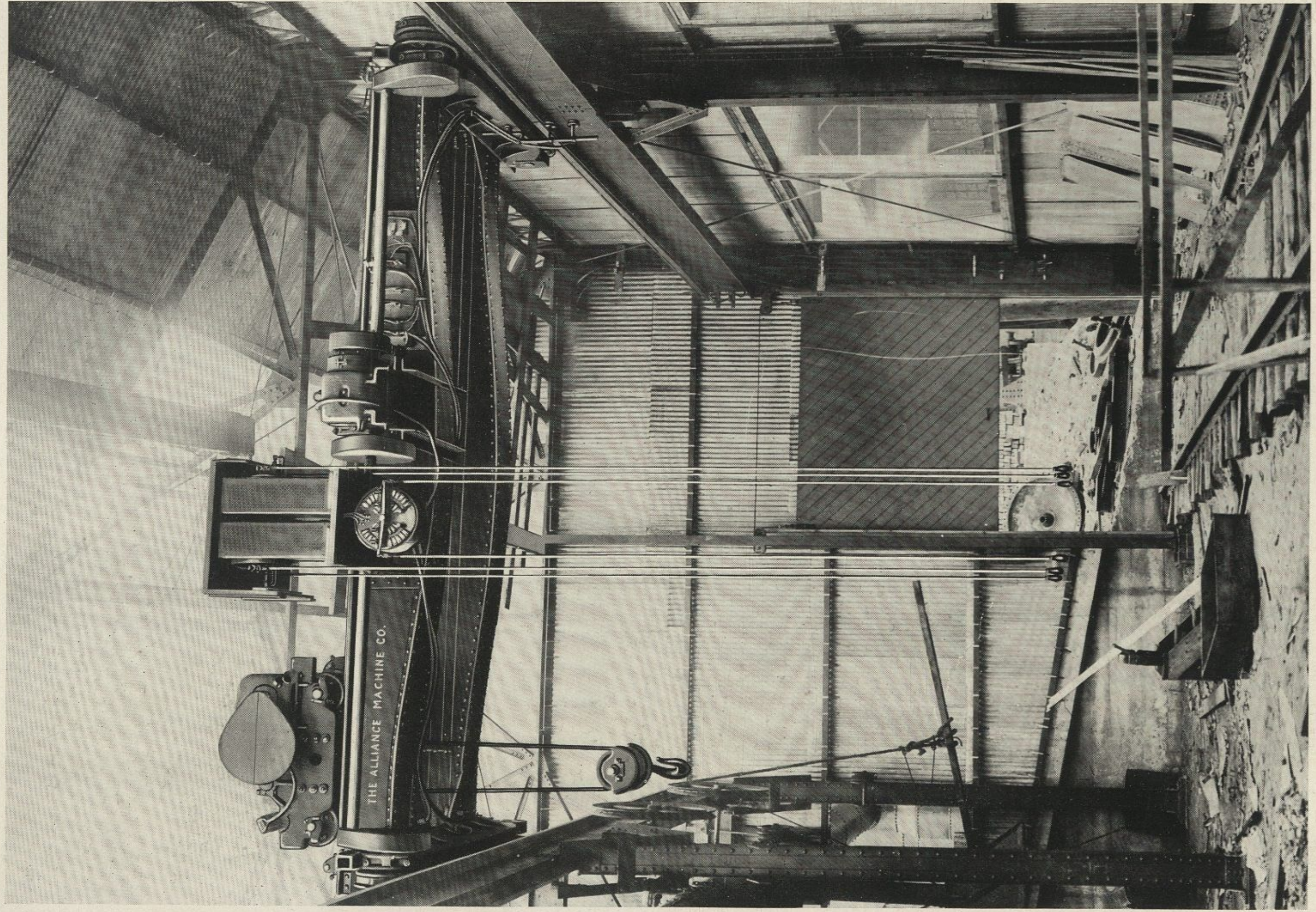
One-Hundred-Ton, Three-Motor Crane Trolley with Fifteen-Ton Auxiliary Hoist for Limited Overhead Room

Main hook on this trolley rises 21¼ inches above runway rail
Total height of bridge and trolley only 8 feet
Bethlehem Steel Company

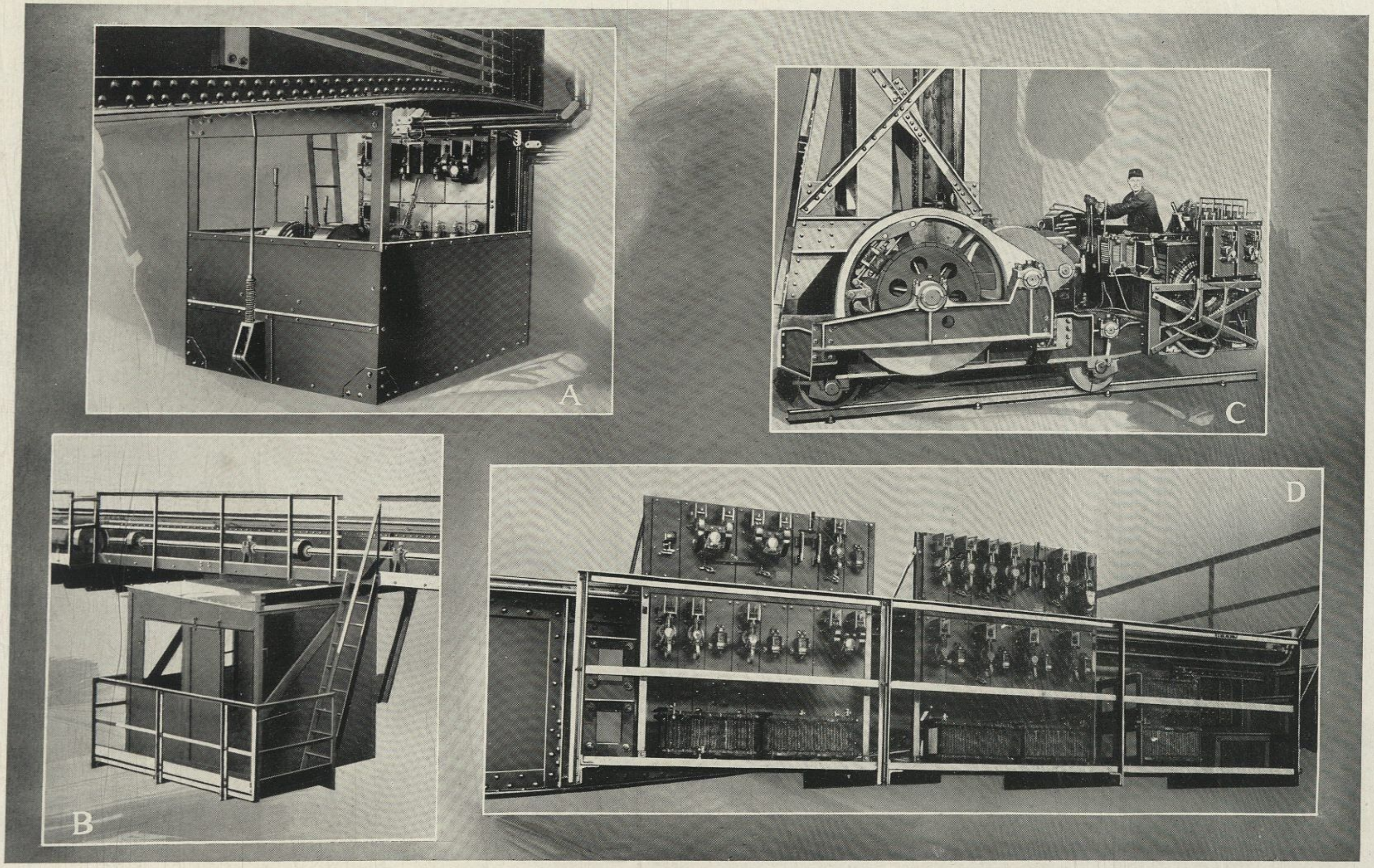

THE ALLIANCE MACHINE CO.

Ten-Ton, Single Drum Trolley

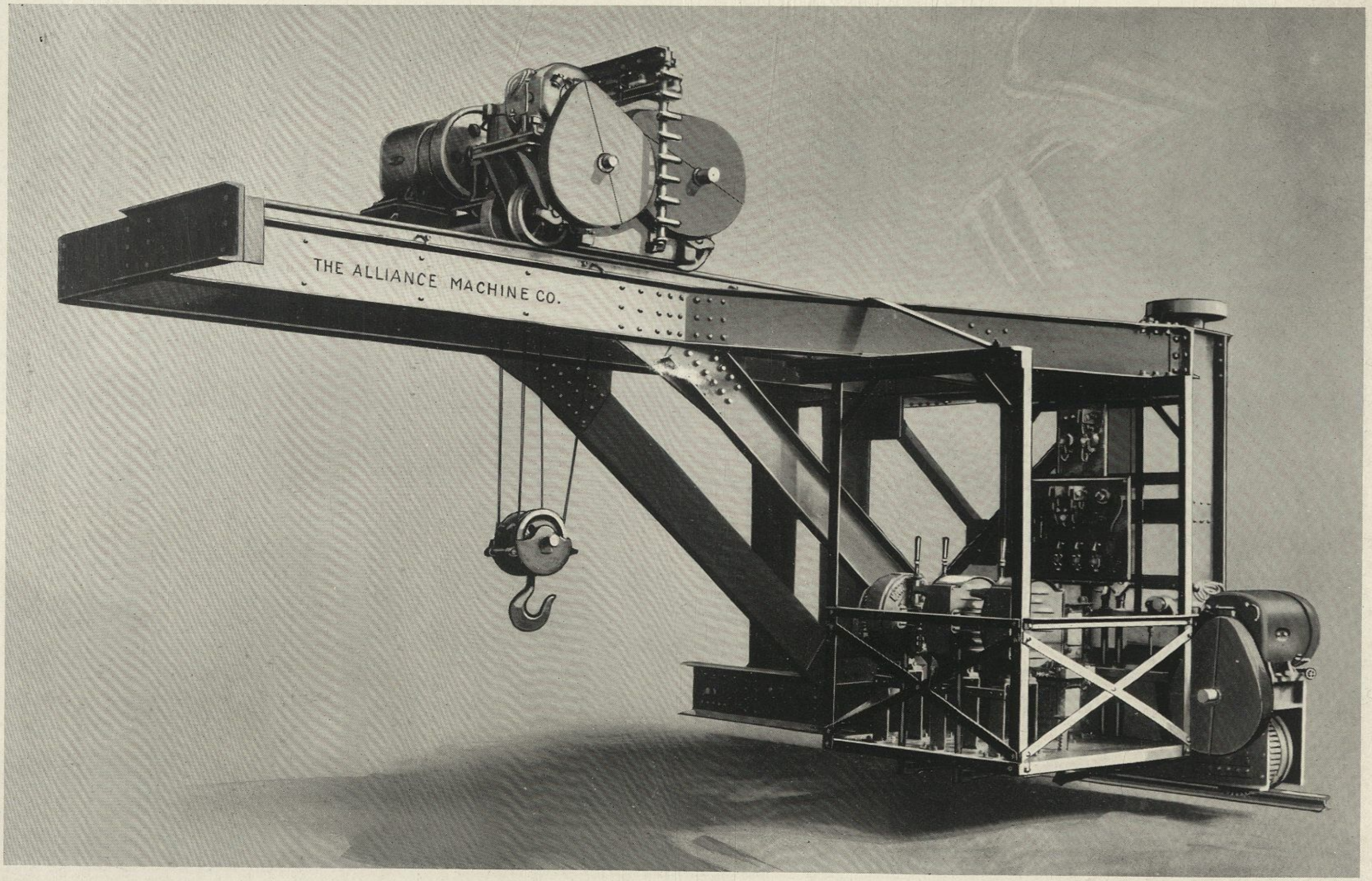
Arranged with four points of lift for handling bundles of pipe or bars


THE ALLIANCE MACHINE CO.

Illustrating One of Several Methods of Locating Controllers for Operating from the Floor by Means of Pendant Hand Chains

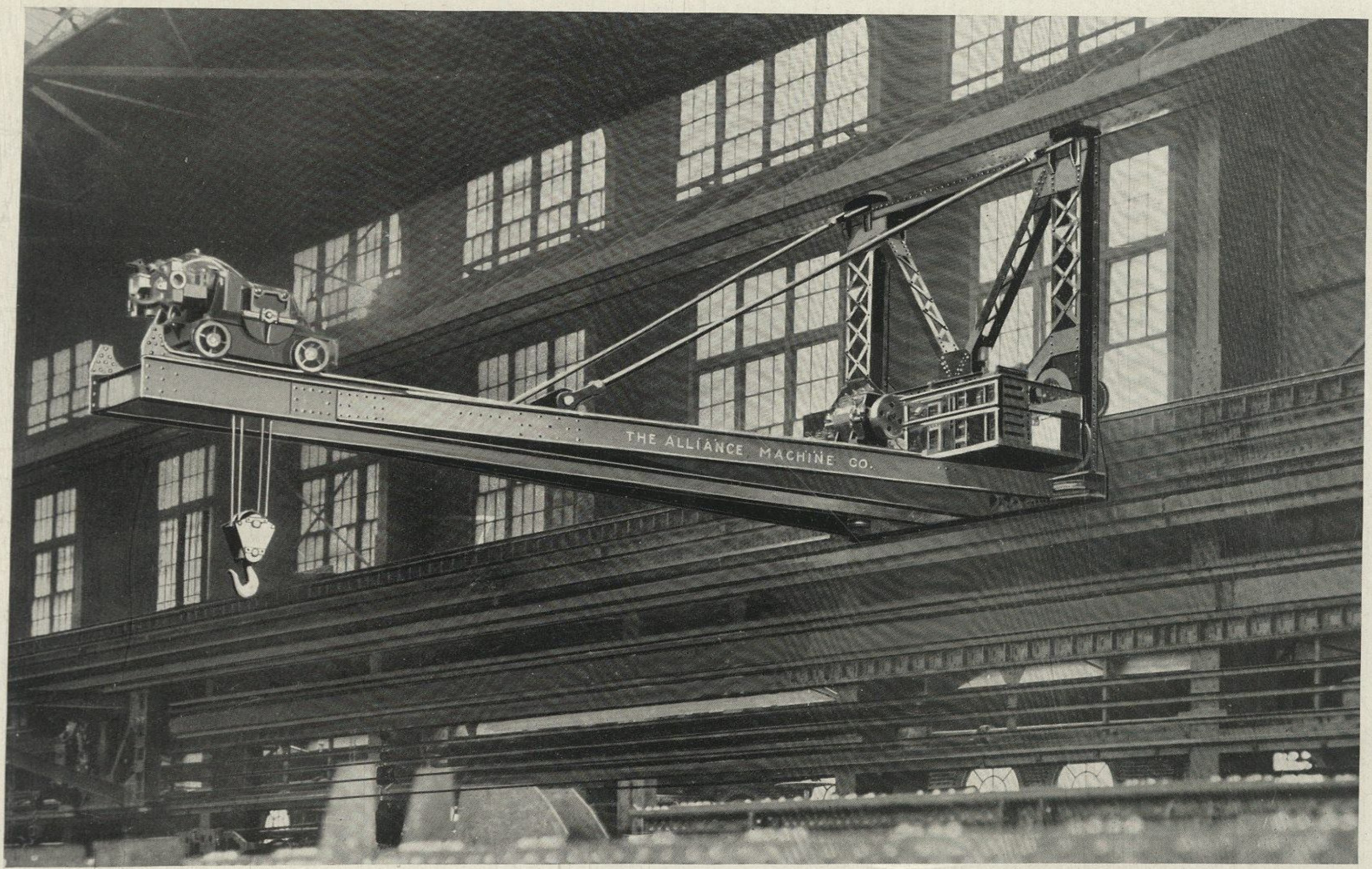


A—Standard Operator's Cage of Crane Having Three or More Motors
B—Same, but Enclosed Type for Outdoor Service
C—Much-Used Arrangement of Control on Soaking Pit Cranes
D—Showing Arrangement of Resistances and Relay Panels on Bridge Girder Where Operator's Cage Limitations were Imposed


THE ALLIANCE MACHINE CO.

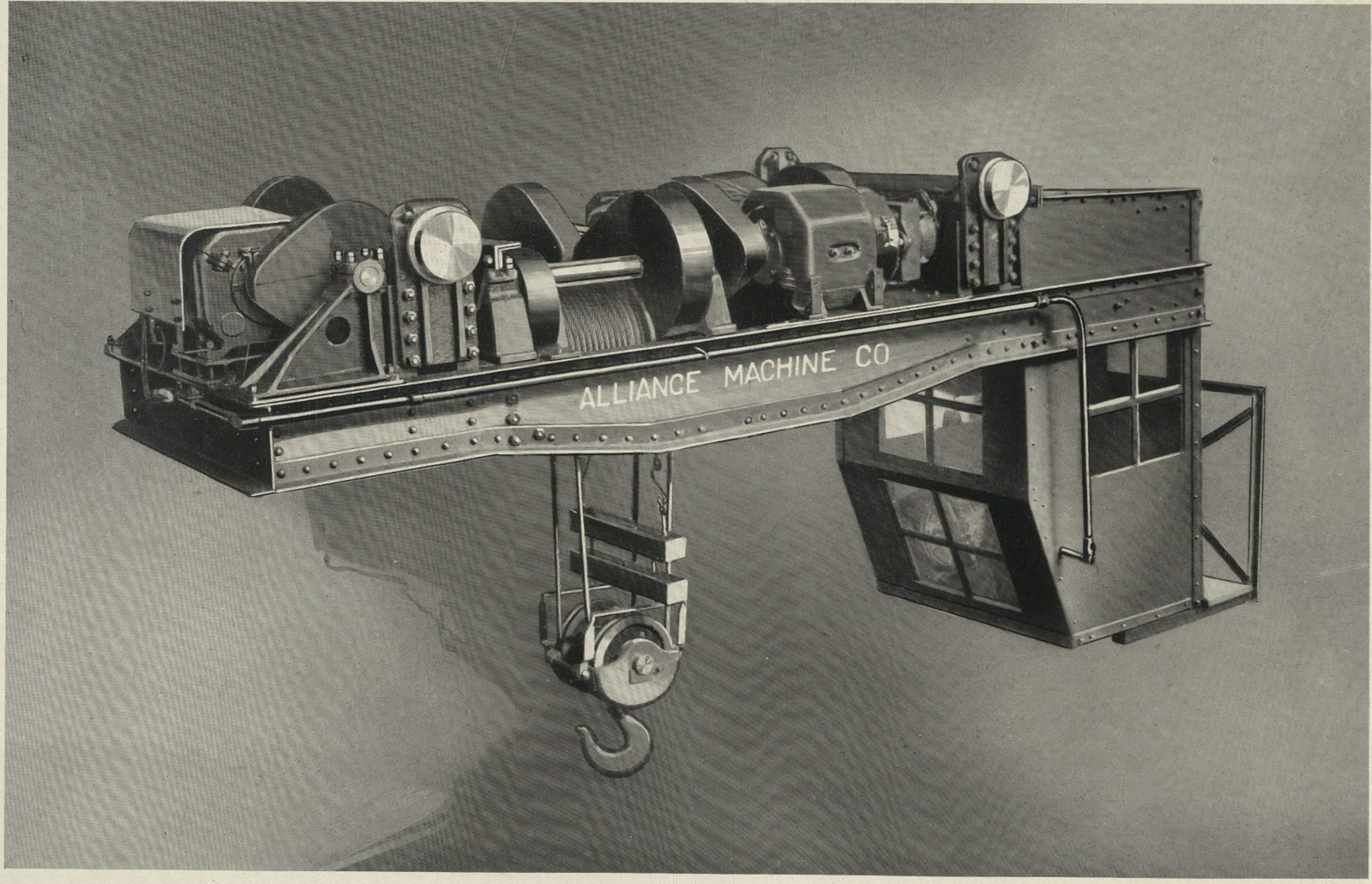
Shop Picture Five-Ton, Three-Motor Traveling Wall Jib Crane

Built in different capacities also with top braced jib to suit conditions. See application on opposite page.



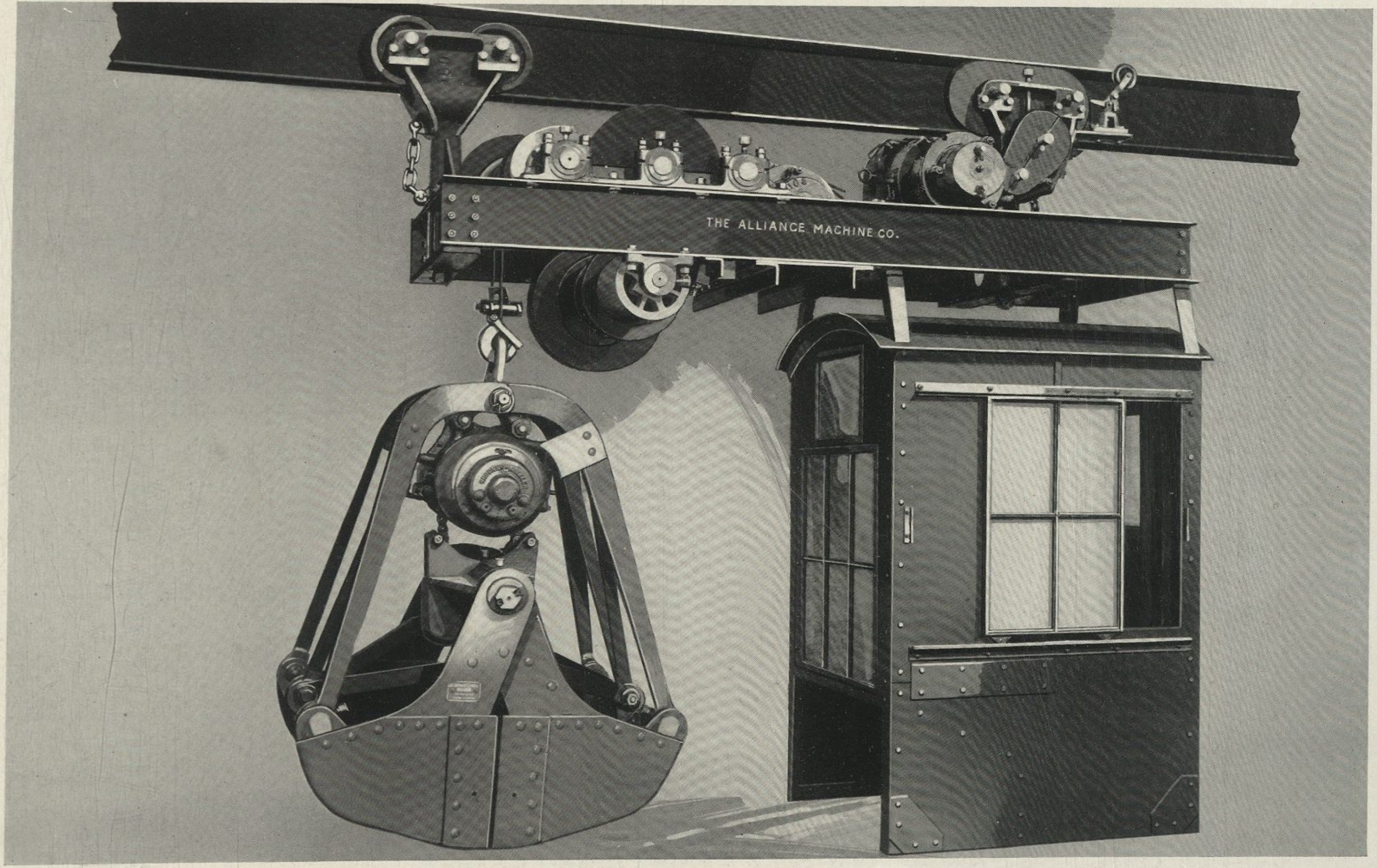
Ten-Ton, Three-Motor Traveling Wall Jib Crane

This type of crane is exceedingly useful in bridge shops, factories and machine shops, as the wall crane can serve individual machines or tools in case of bridge shops and machine shops, and handle large flasks in foundries, which would otherwise tie up the regular traveling crane for too long a period.

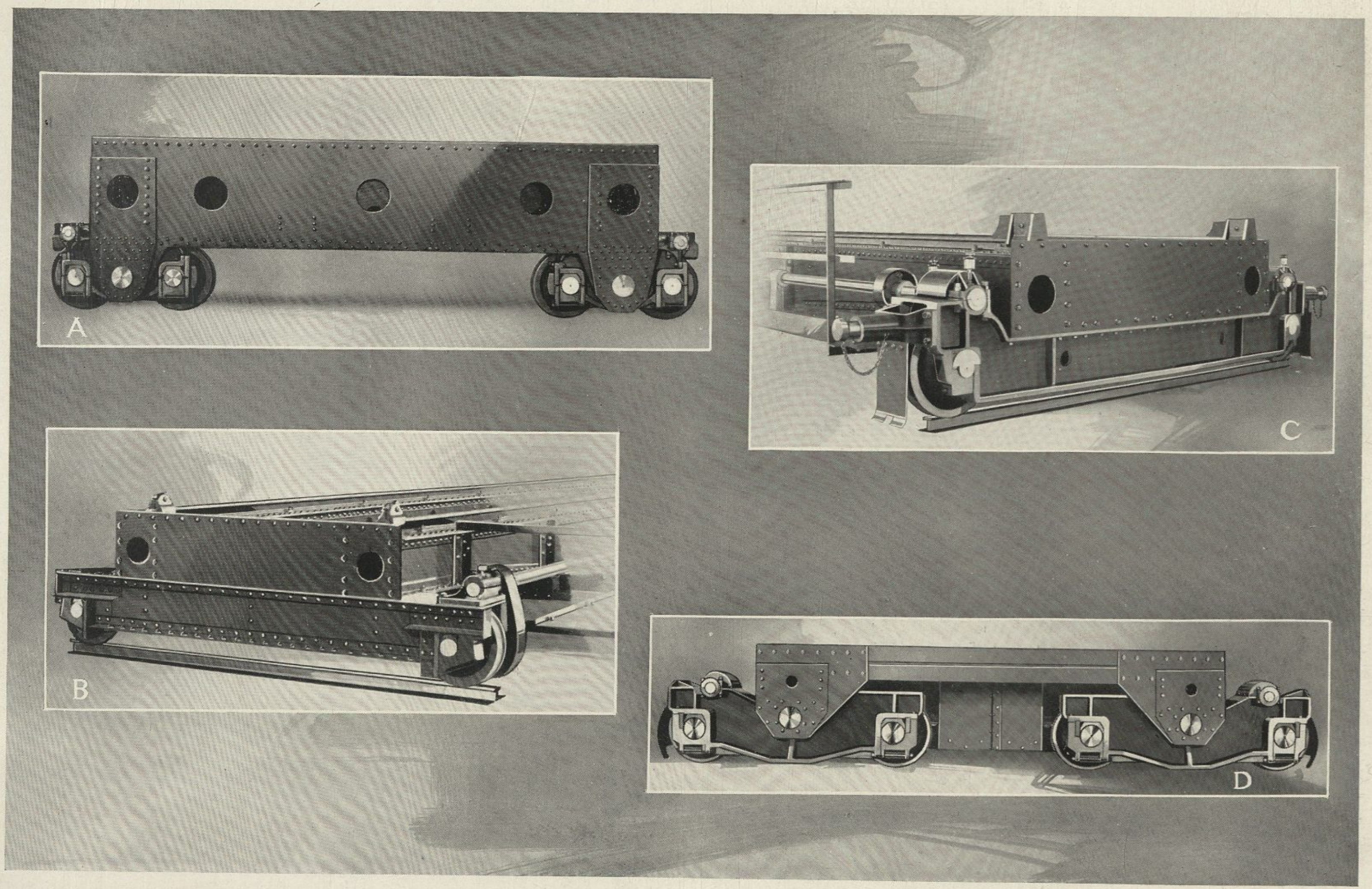


Twelve and One-Half-Ton, Three-Motor, Special Man-Operated Trolley

For handling grab buckets as well as regular hook service as shown
Built for the Camden Iron Works


THE ALLIANCE MACHINE CO.

Monorail Hoist, with Motor-Operated Bucket
Built in all capacities and for every service.

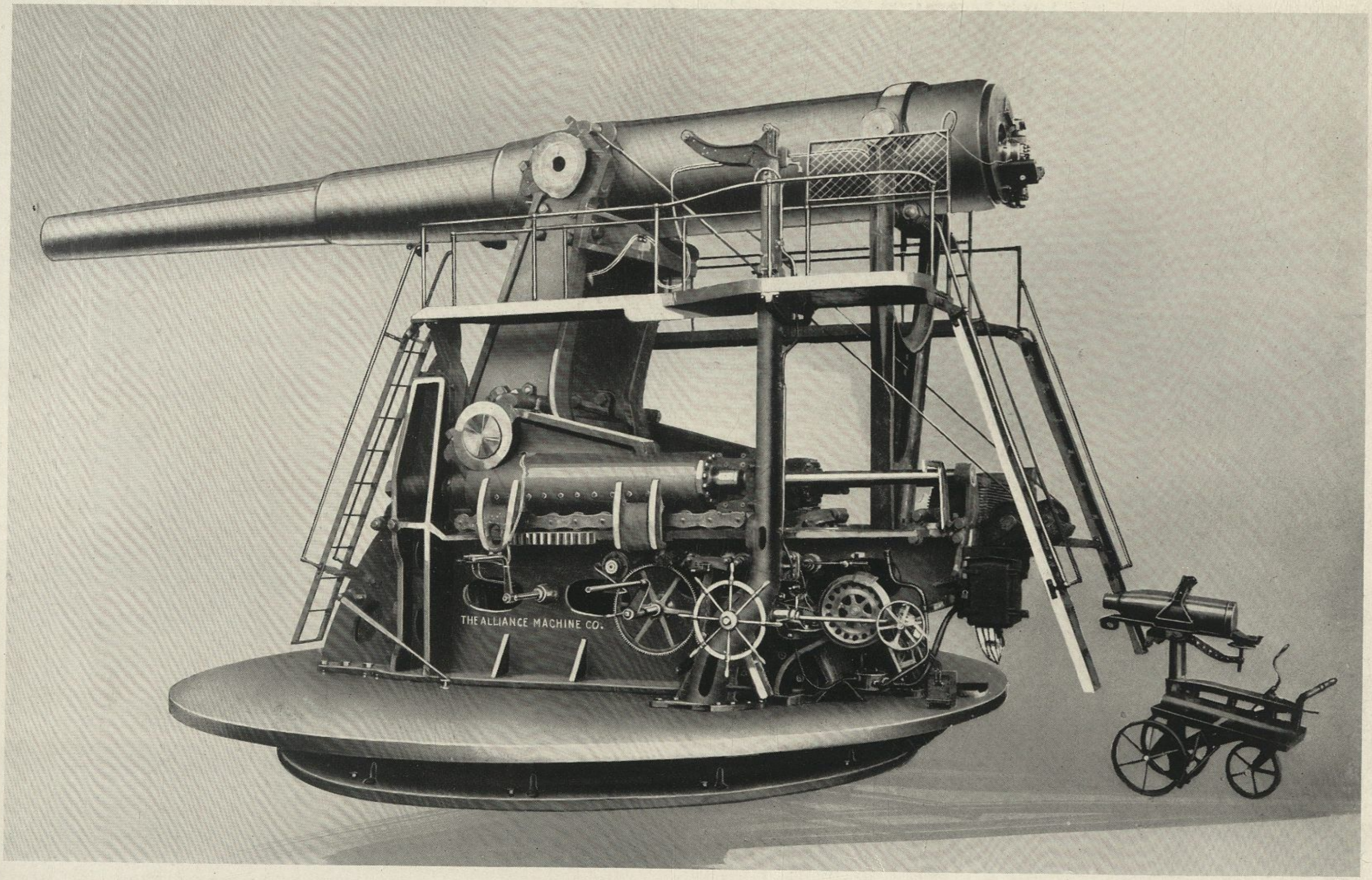


A—Standard Structural, Eight-Wheel, Bridge End Construction
B—Standard Structural, Four-Wheel, Bridge End Construction
C—Standard Cast Steel, Four-Wheel, Bridge End Construction
D—Special Construction and Arrangement of Equalizing Trucks for Eight-Wheel Bridge for Limited Overhead Room and Maximum Distribution of Load on Runway

THE section following is devoted to example illustrations of our line of special equipment, such as —

Gun Carriages
Gun Hoists for Tempering Plants
Electric Coke Pushers and Levelers
Steam Drop Hammers
Punching and Shearing Machines
Pipe Forming Machines
Presses, Geared and Hydraulic

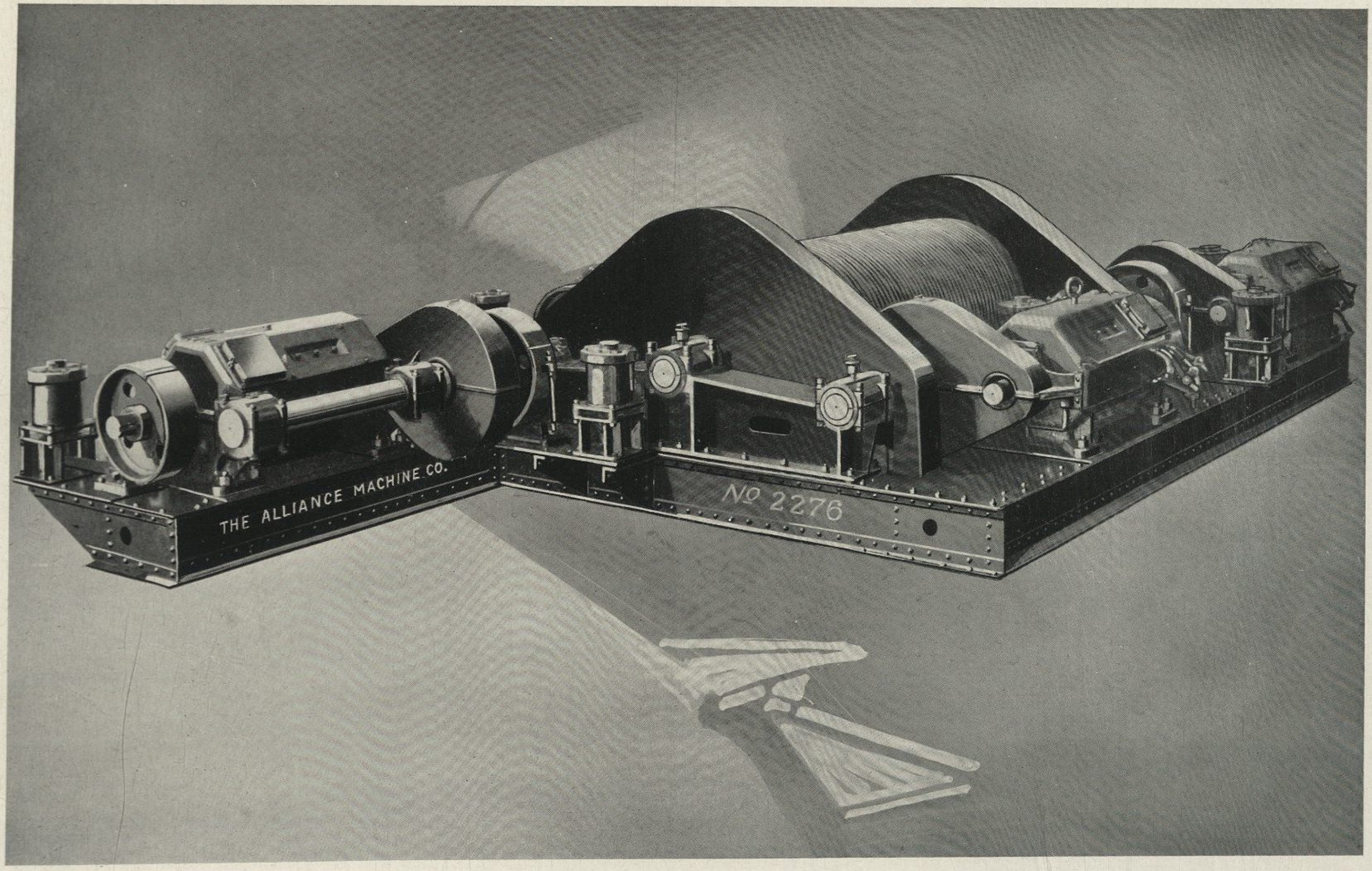
Lack of space prevents illustrations of Rolling Mill Machinery, Copper Converting Machinery, Charging Larries, Scale Cars, etc., which, however, we are prepared to furnish and for which we solicit inquiries.



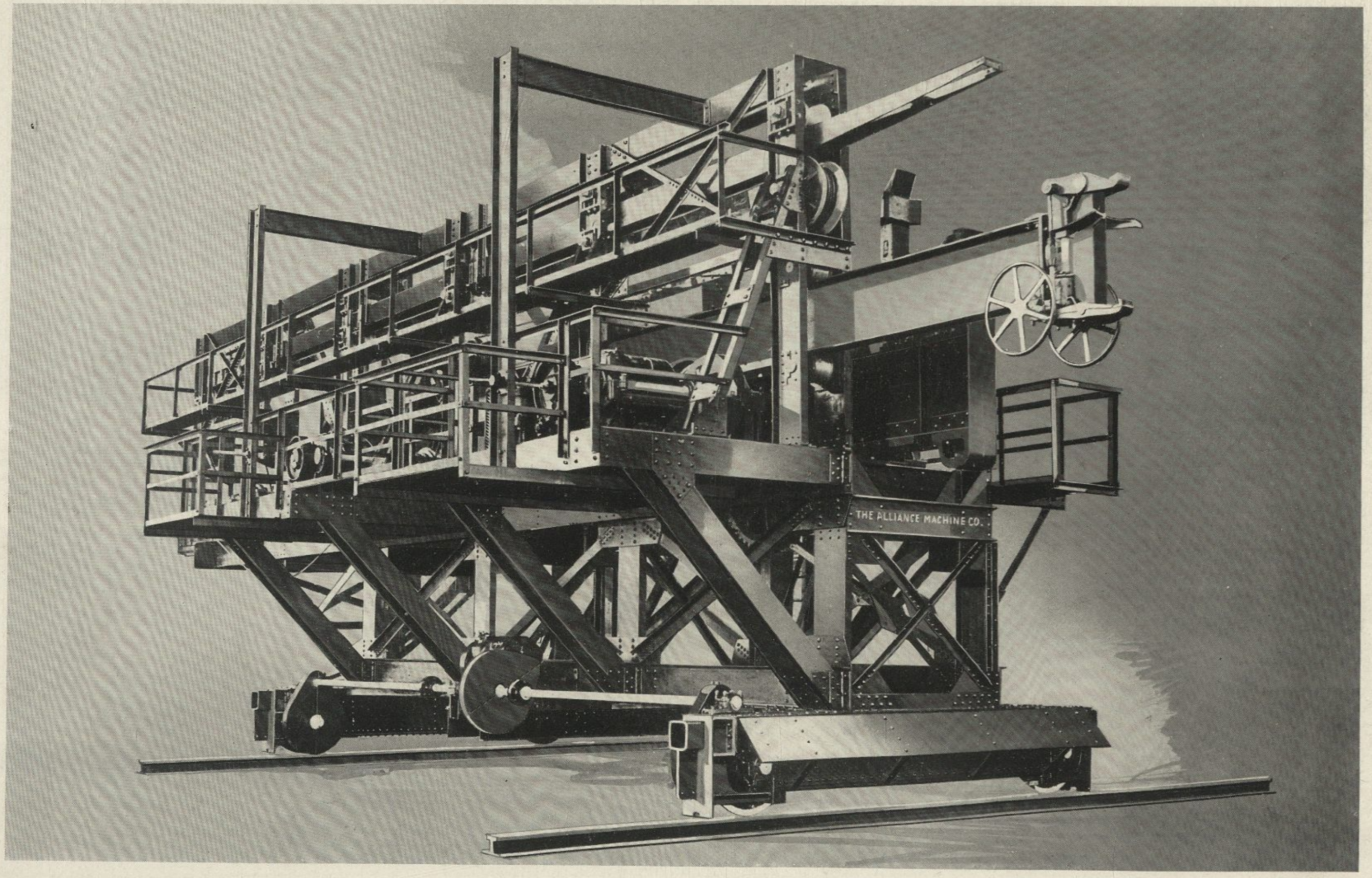
12-Inch Disappearing Gun Carriage

Built for the Ordnance Department of the U. S. Army

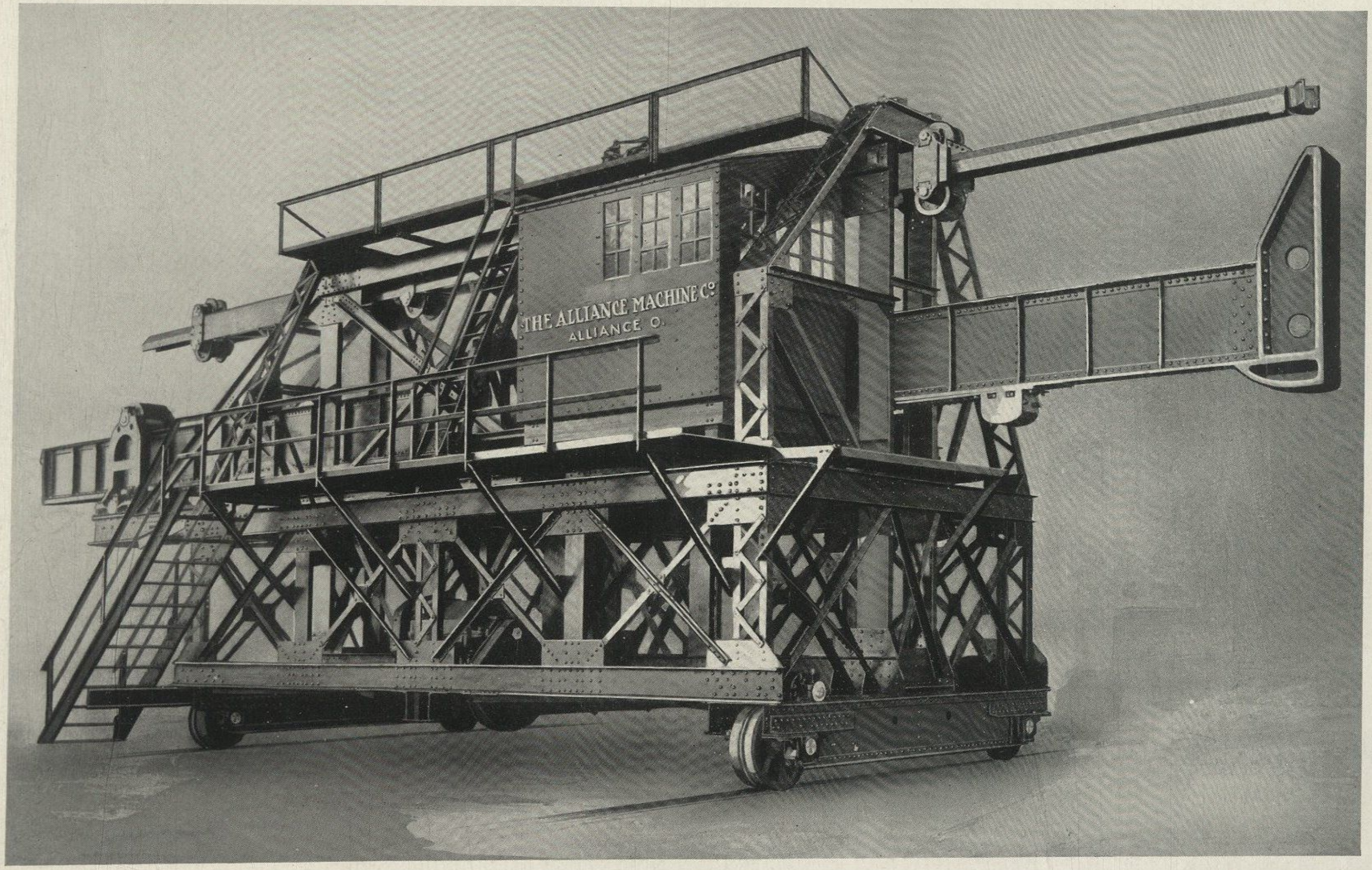
As an example of the character and magnitude of the special work which our shops are equipped to build, we show herewith, one of the 12-inch disappearing gun carriages which we have built for the U. S. Government; and to call particular attention to the fact that *every part of the carriages was machined, finished and assembled in our own shops.* Total height above base plate, 19 feet; total height from bottom counterweight, 26 feet 6 inches; diameter of base plate, 19 feet, 0 inches; diameter of racer ring across platform, 24 feet 4 inches; length of 12-inch gun, 38 feet 0 inches; weight of 12-inch gun, 112,000 pounds; weight of carriage, 510,000 pounds; weight of gun and carriage, 622,000 pounds.


THE ALLIANCE MACHINE CO.
Nº 2276

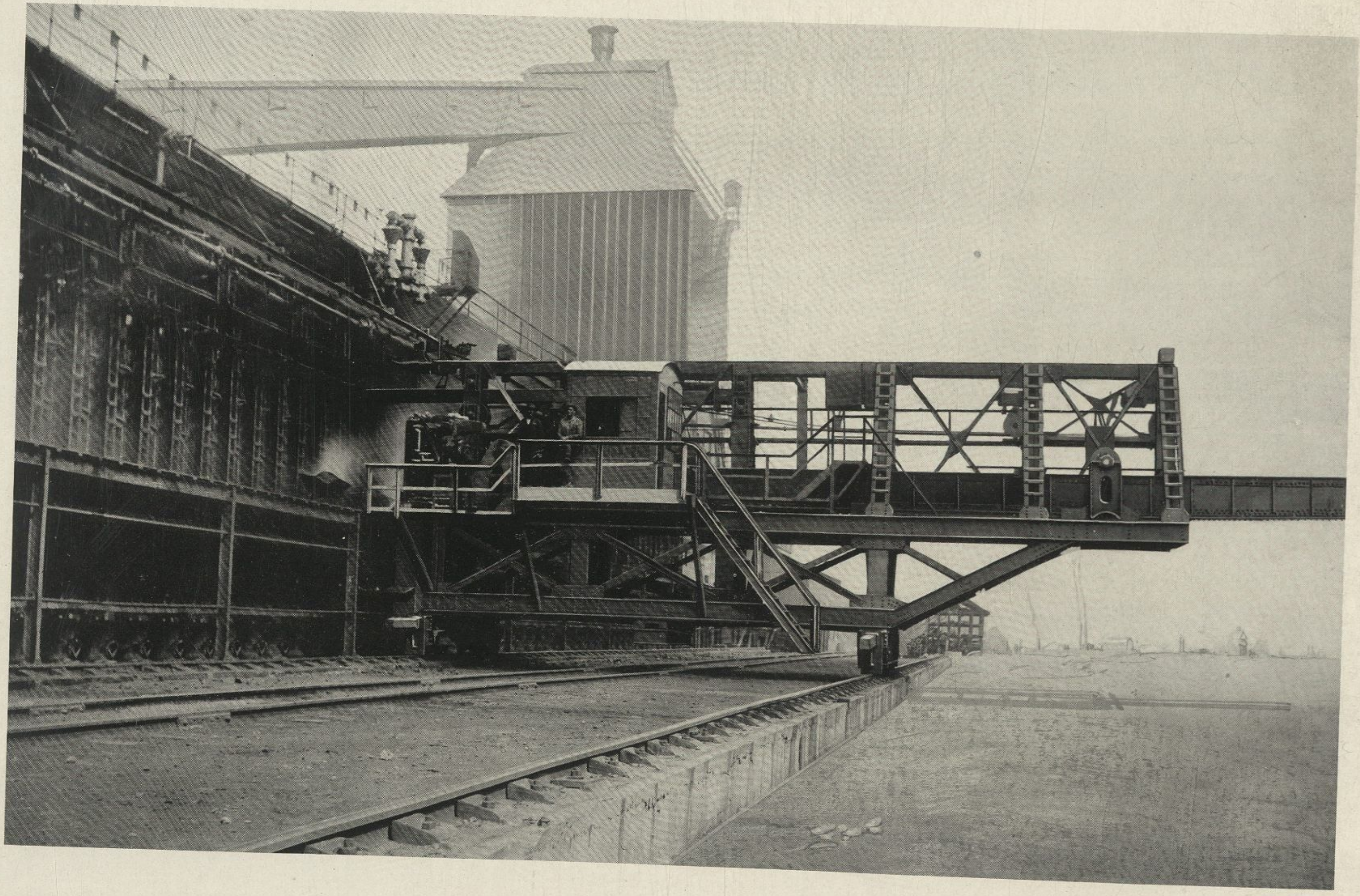
One Hundred-Ton Stationary Hoist. 116-Foot Lift Operated by Four 150 Horse Power Motors
Used for handling heavy guns in tempering plant of The Bethlehem Steel Co., So. Bethlehem, Pa.


THE ALLIANCE MACHINE CO.

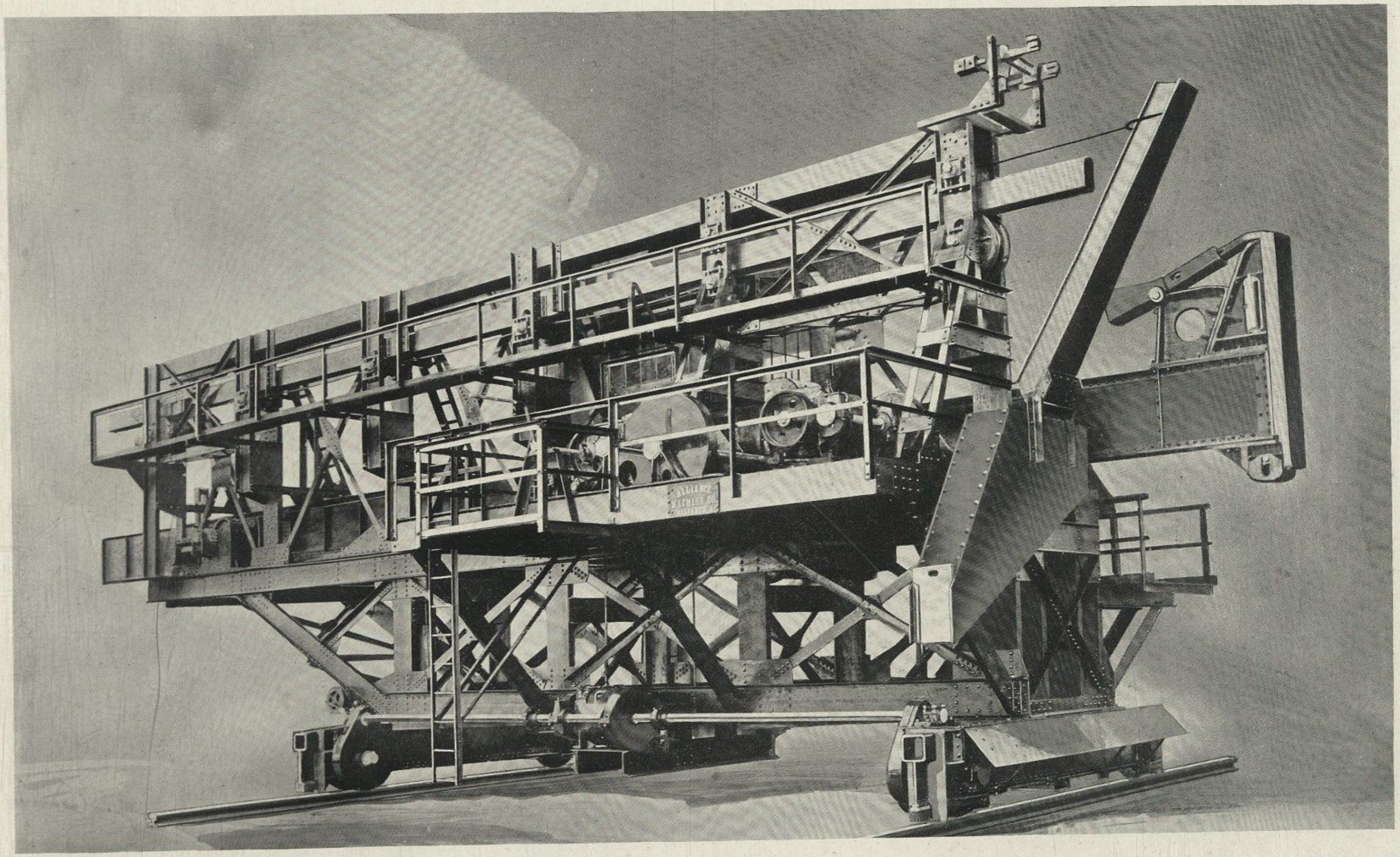
Shop View Electrically Operated Coke Pusher and Leveler, with Door Extractor Ram


THE ALLIANCE MACHINE Co
ALLIANCE O.

Shop View Electrically Operated Coke Pusher and Leveler



Installation View of Electrically Operated Coke Pusher and Leveler

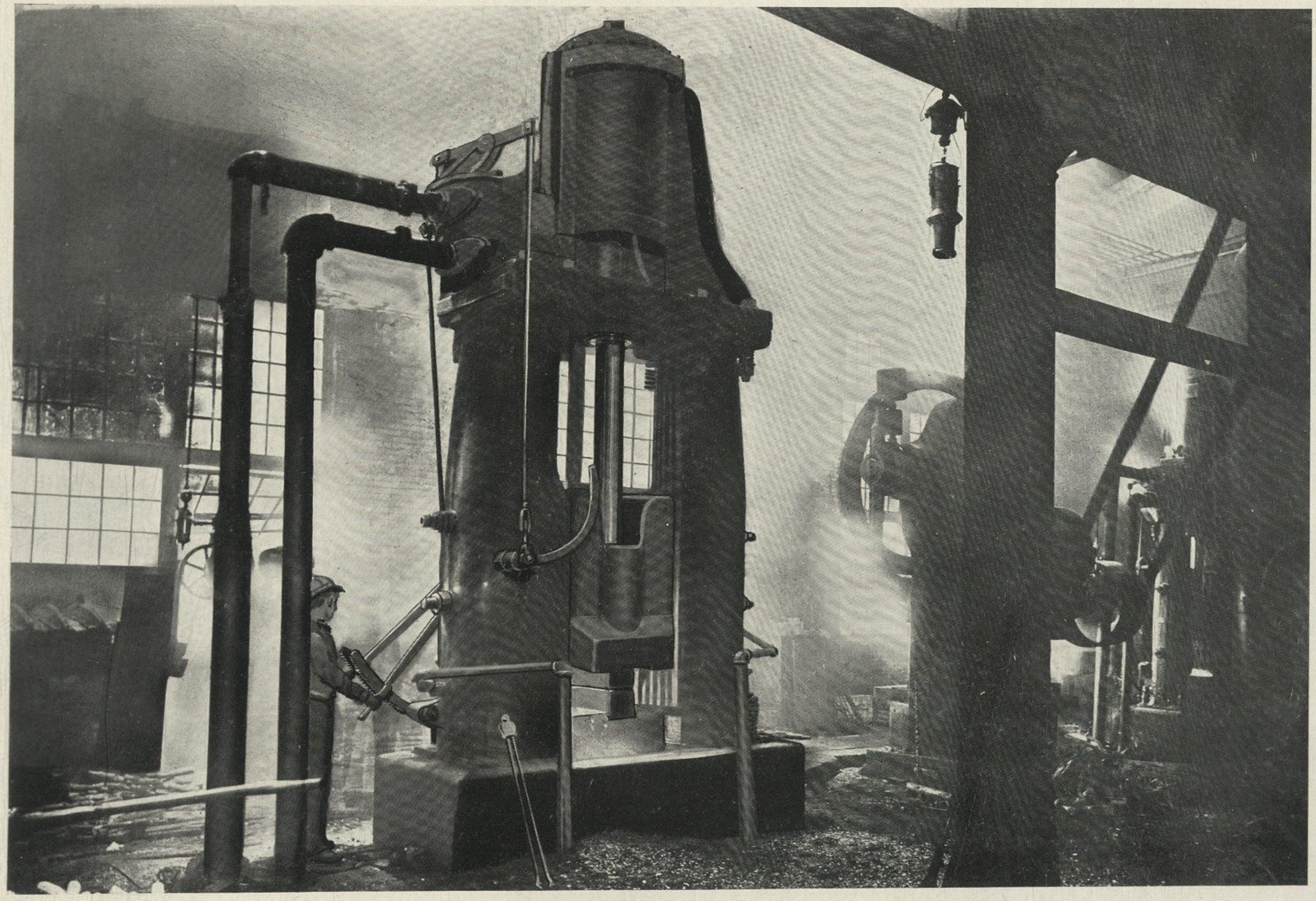


Shop View Electrically Operated Coke Pusher and Leveler

List of Users of Alliance Machine Co.'s Steam Drop Hammers

		Pounds Capacity
Alliance Machine Co.	1	800
	1	2,000
American Forge & Machine Co. (Wright Wrench & Forging Co.)	1	3,000
	1	2,000
	1	1,500
American Spiral Pipe Works	1	12,000
	1	8,000
American Steel Foundries	1	1,000
Buckeye Engine Company	1	2,000
Buick Motor Company	5	12,000
	17	6,000
	3	3,500
	11	2,500
	7	2,000
	4	1,500
	13	1,000
Cambria Forge Co.	1	3,000
	1	2,000
Cambria Steel Co.	1	5,000
Canton Drop Forge & Manufacturing Co.	1	5,000
	2	4,500
	1	4,000
	6	3,000
	4	2,000
	2	1,500
	1	1,200
	1	1,000

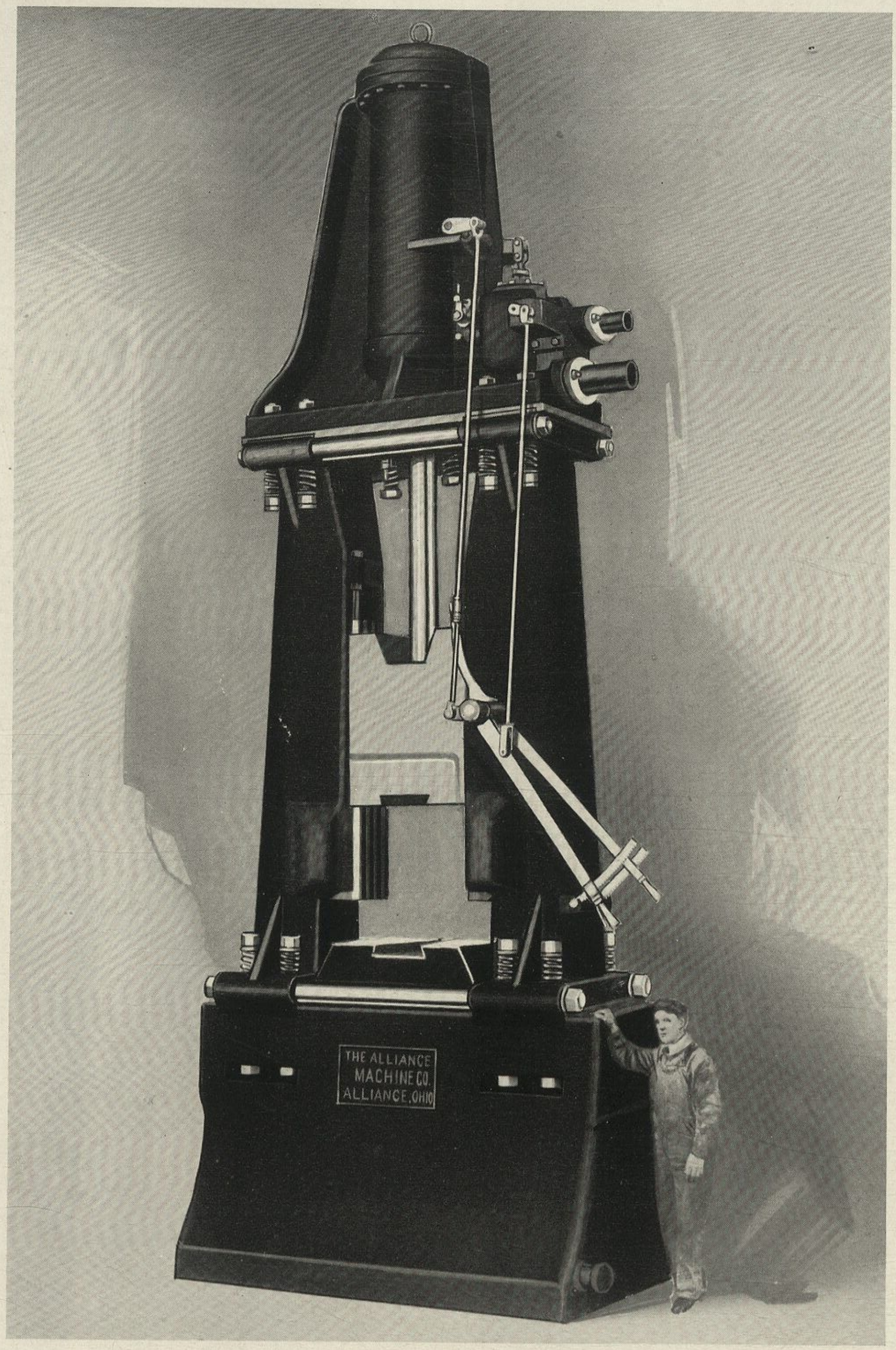
		Pounds Capacity
Cleveland City Forge & Iron Co.	1	3,000
	2	1,000
Crescent Drop Forge Co.	1	1,000
Eicher Company	1	2,500
Fulton Drop Forge Company	2	4,000
	3	3,000
	1	2,000
Humane Horseshoe Company	1	800
Lewis Spring & Axle Co.	2	2,500
New Castle Forge Company	1	2,000
Pontiac Drop Forge Company	1	2,500
	1	2,000
	1	1,500
	2	1,000
	1	600
Superior Drop Forge Company	1	4,000
	2	2,000
	1	1,000
	1	1,000
Transue Williams Company	2	8,000
	3	6,000
	1	4,000
	4	3,000
	7	2,000
	2	1,500



12000-Pound Steam Drop Hammer

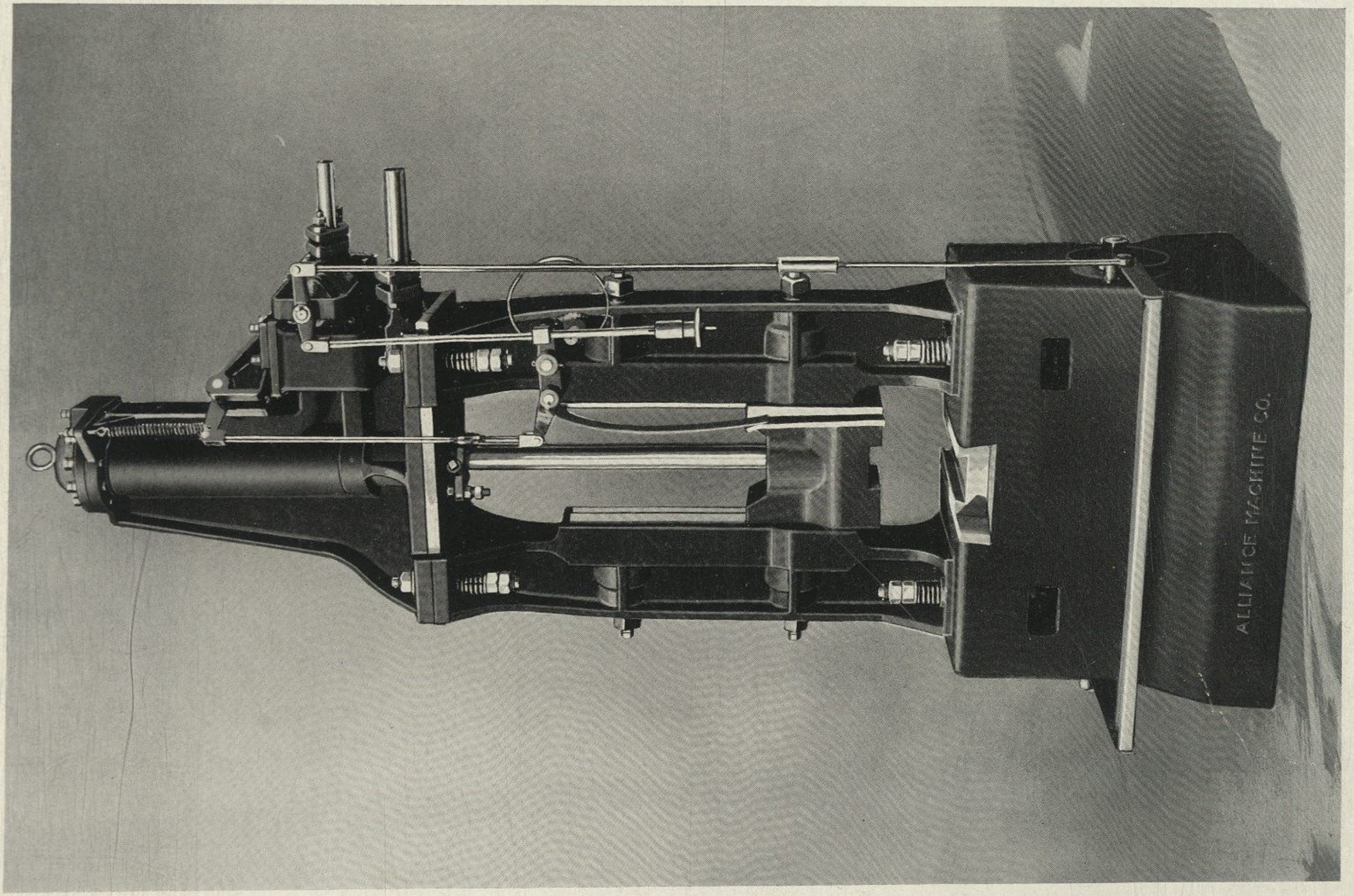
Buick Motor Co., Flint, Mich.

Who are using 60 of our Hammers in sizes from 1000 pounds to 12,000 pounds.


THE ALLIANCE
MACHINE CO.
ALLIANCE, OHIO

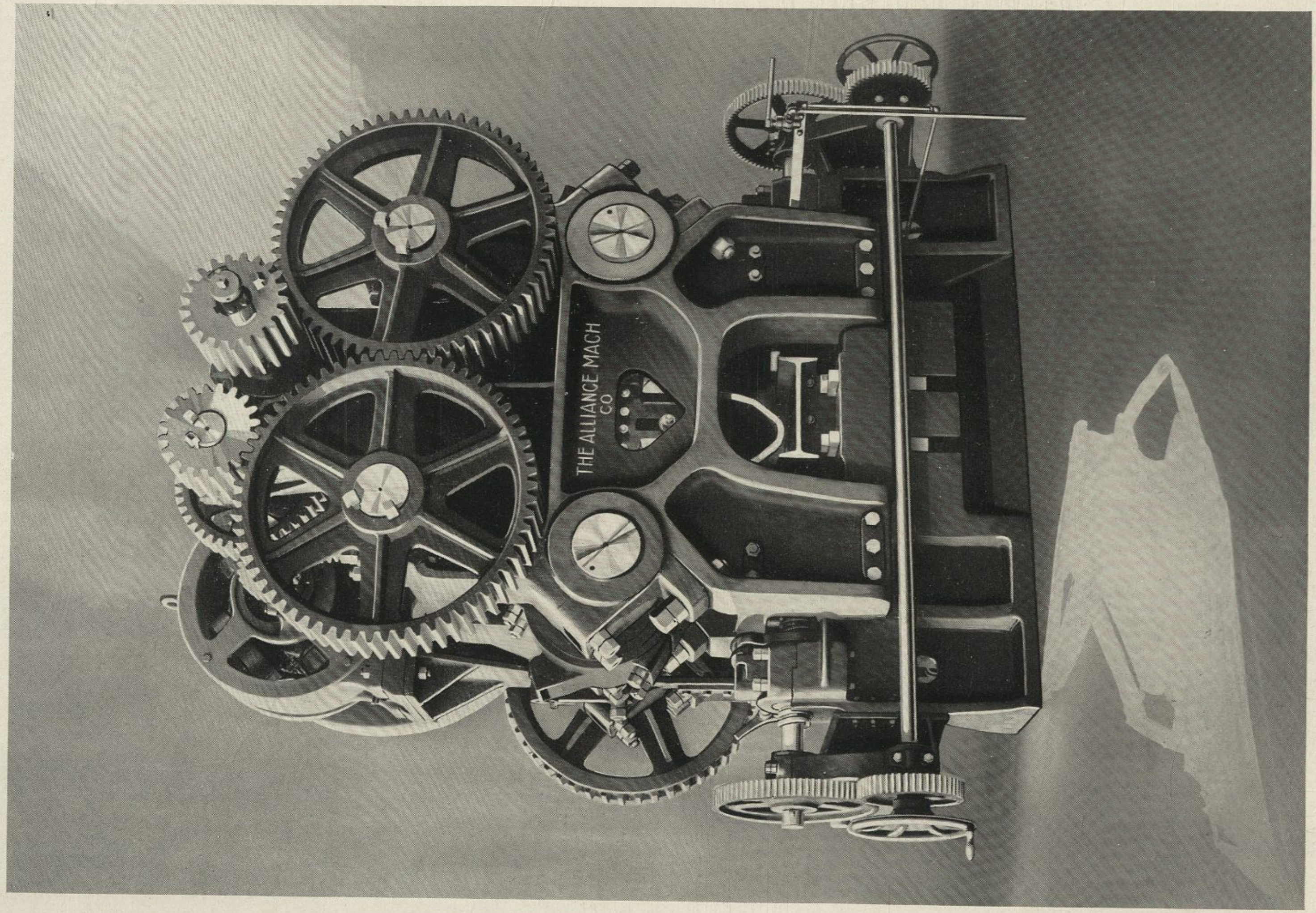
Steam Drop Hammer—8000-Pound to 12000-Pound

Can be furnished either single or double acting.


ALLIANCE MACHINE CO.

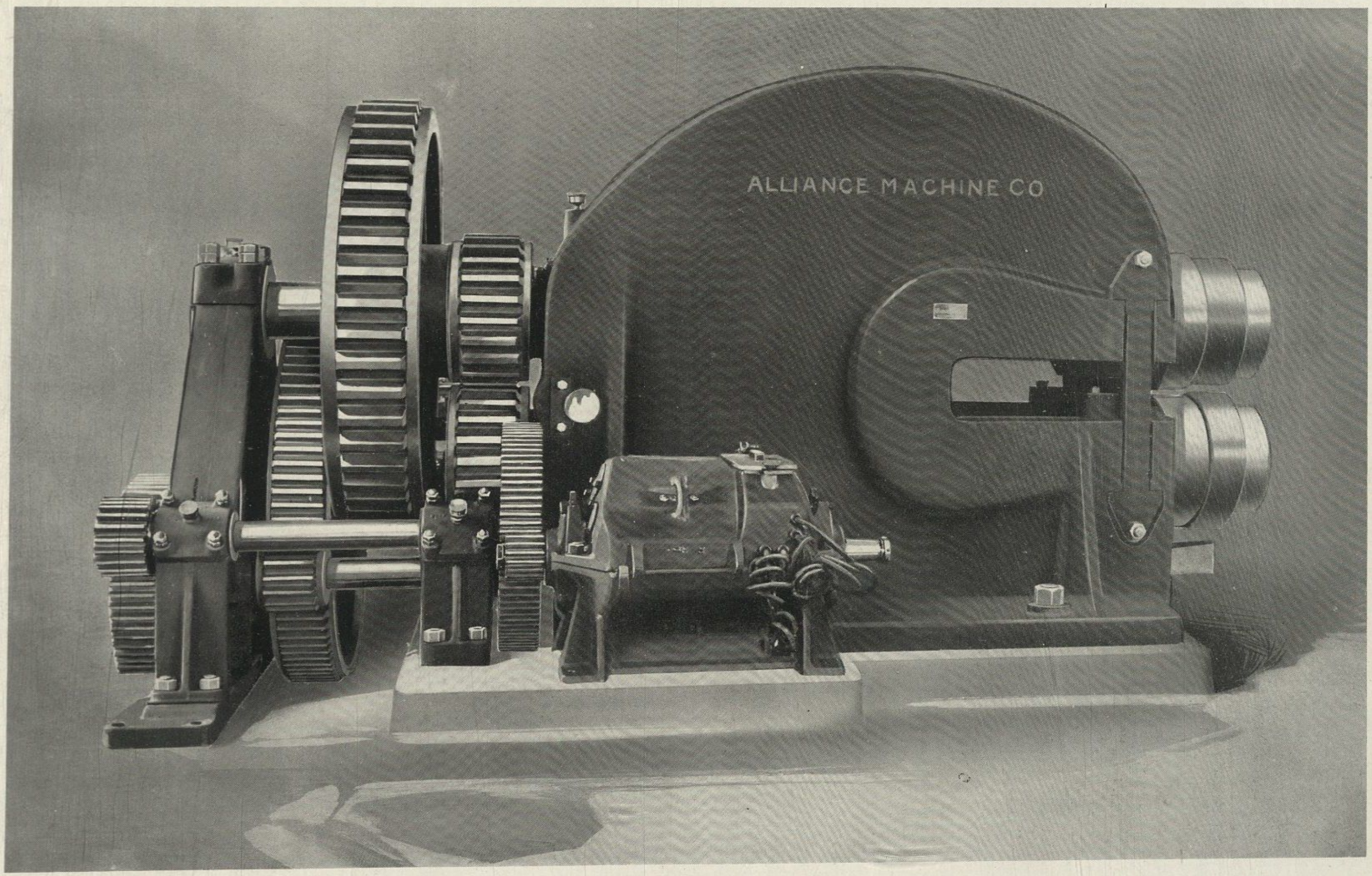
Automatic Steam Drop Hammers

Any capacity up to 6000 pounds.


THE ALLIANCE MACH
CO

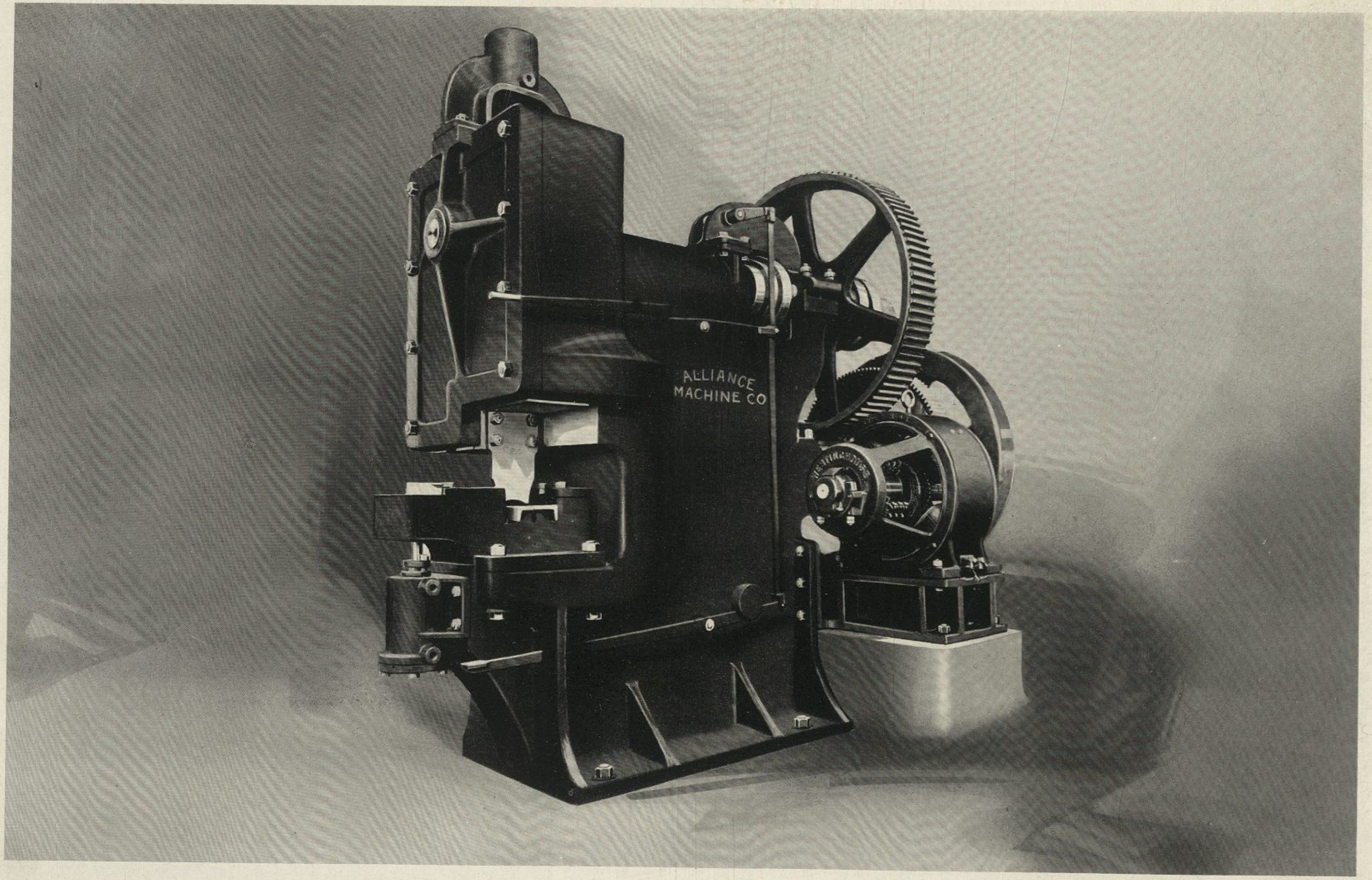
Motor-Driven I-Beam Shear

Built for Eastern Steel Co., Pottsville, Pa.


ALLIANCE MACHINE CO

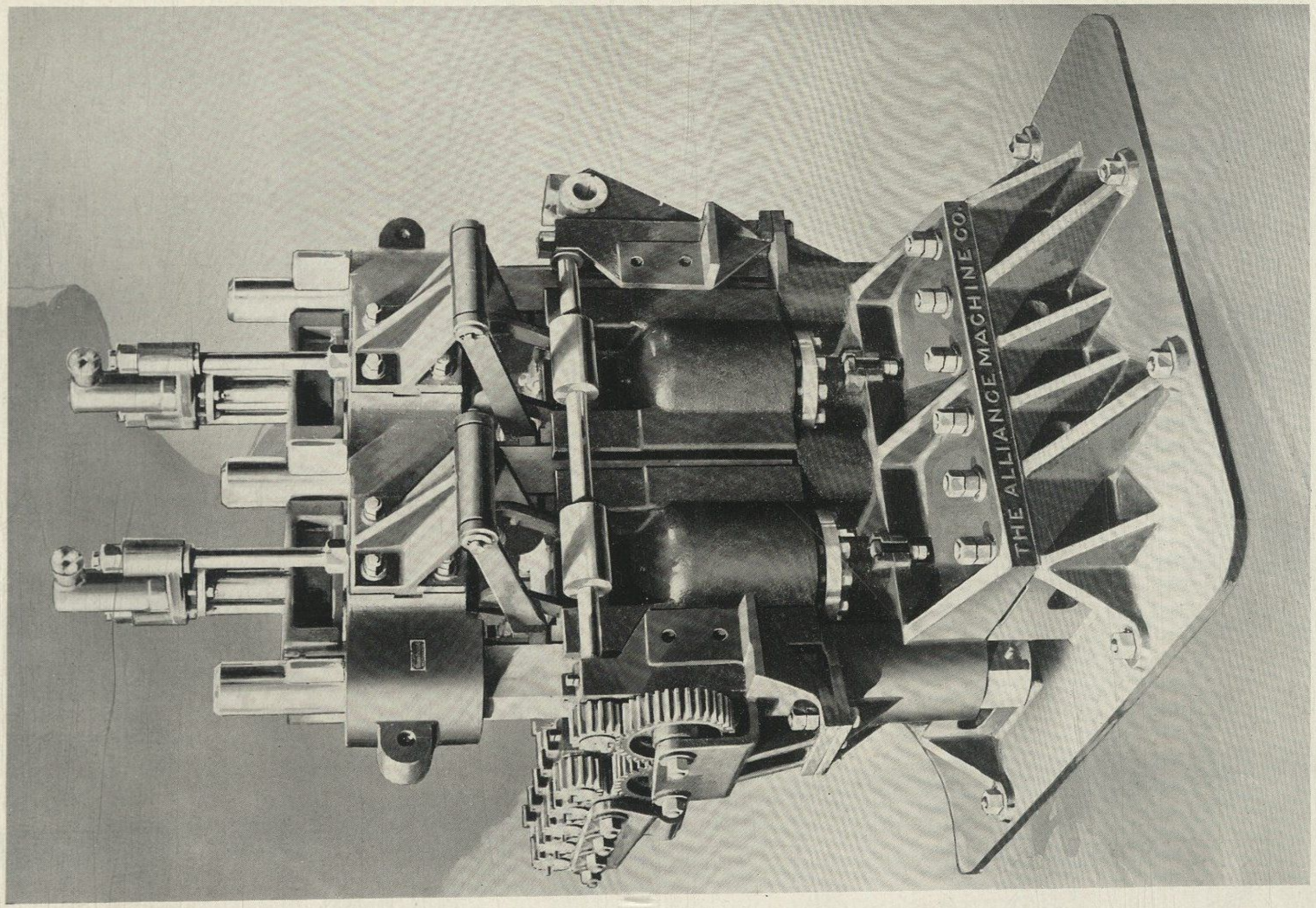
Electric Joggling Machine

This machine is designed to joggle plates up to ¾ inches in thickness. Built in any capacity.



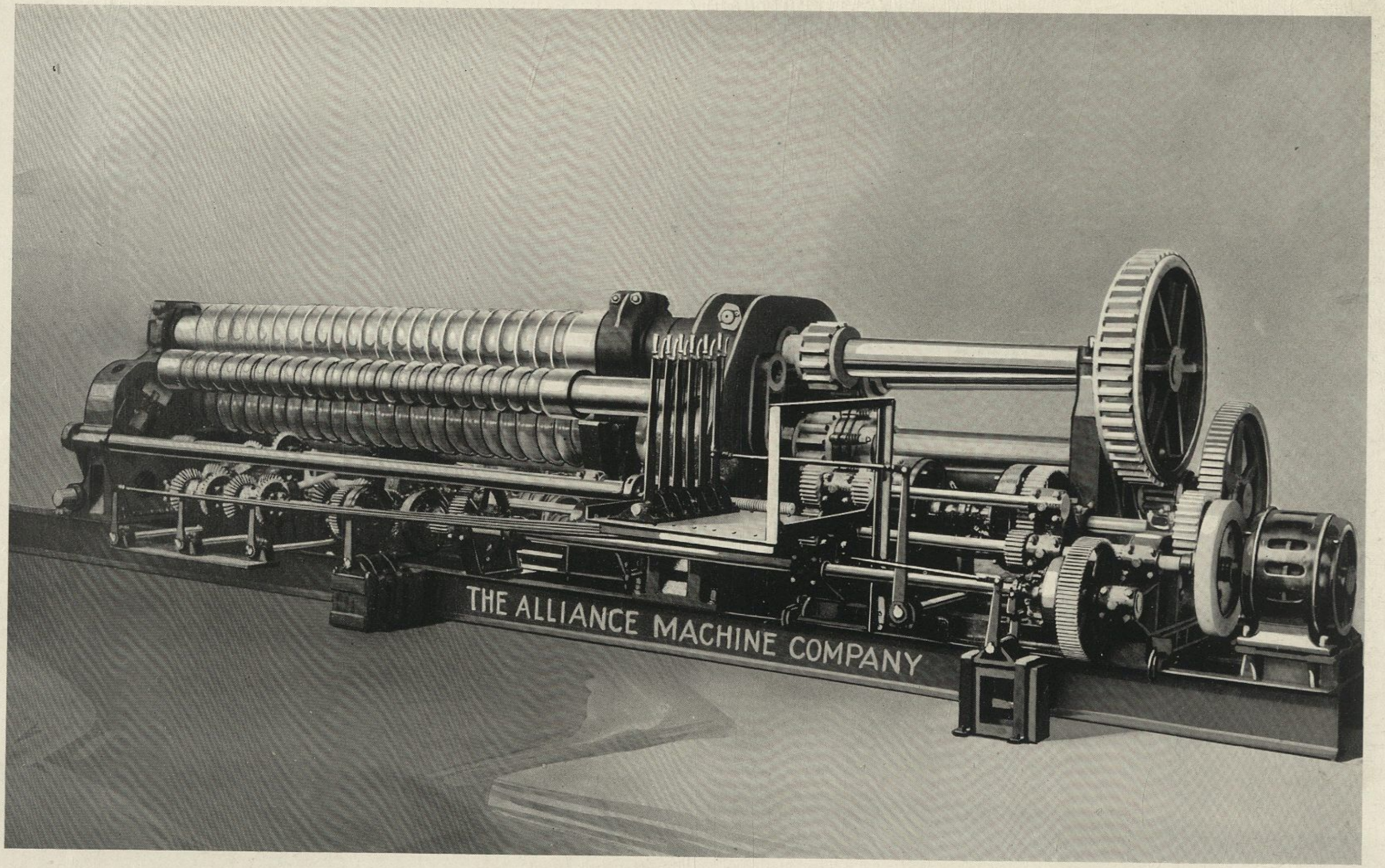
Electric I-Beam Shear

This shear is designed to cut I-beams or channels of any size up to 12 inches.
The next size machine is built for cutting from 12 inches to 24 inches.

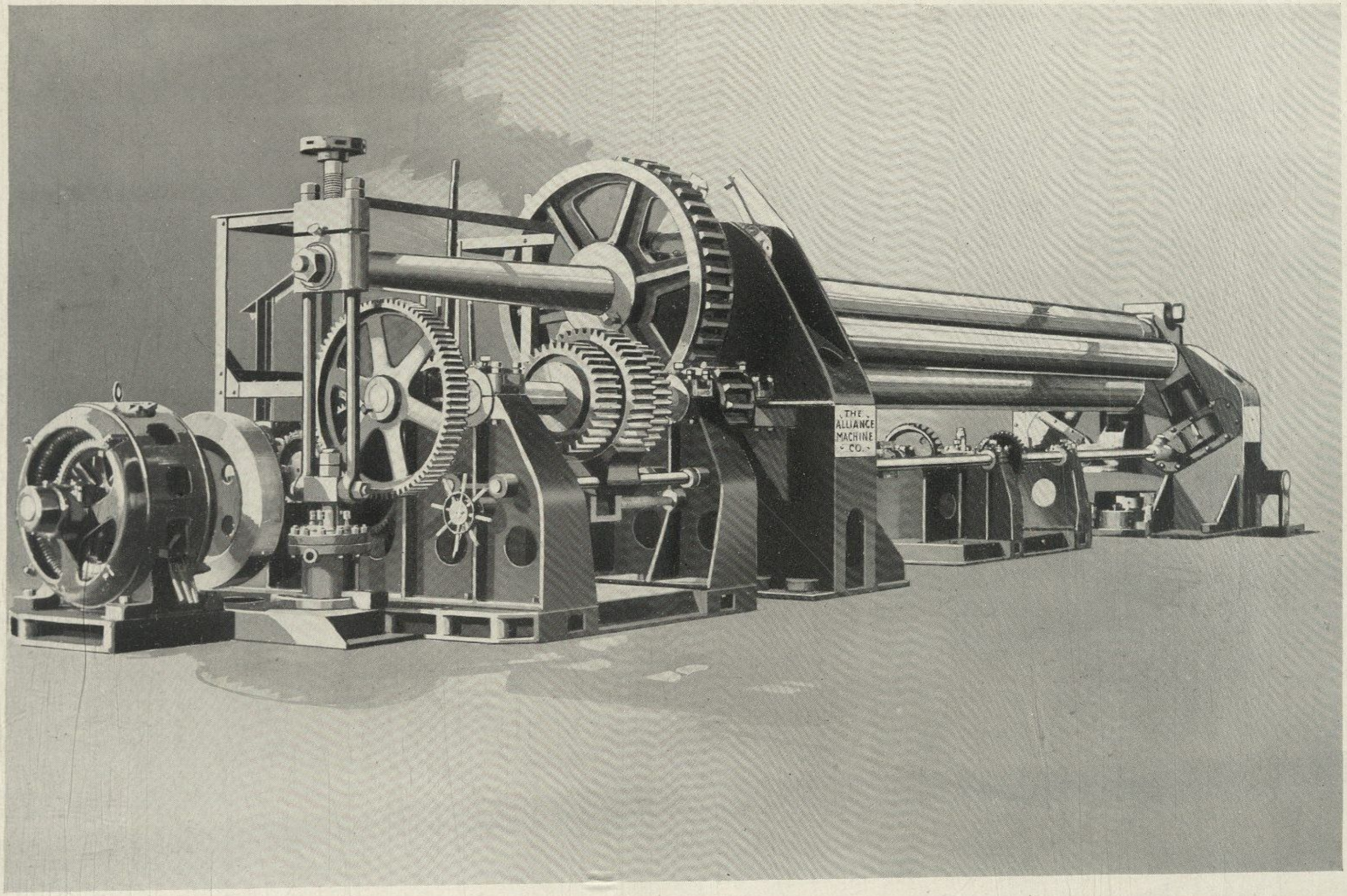

THE ALLIANCE MACHINE CO.

Duplex Hydraulic Billet Shear

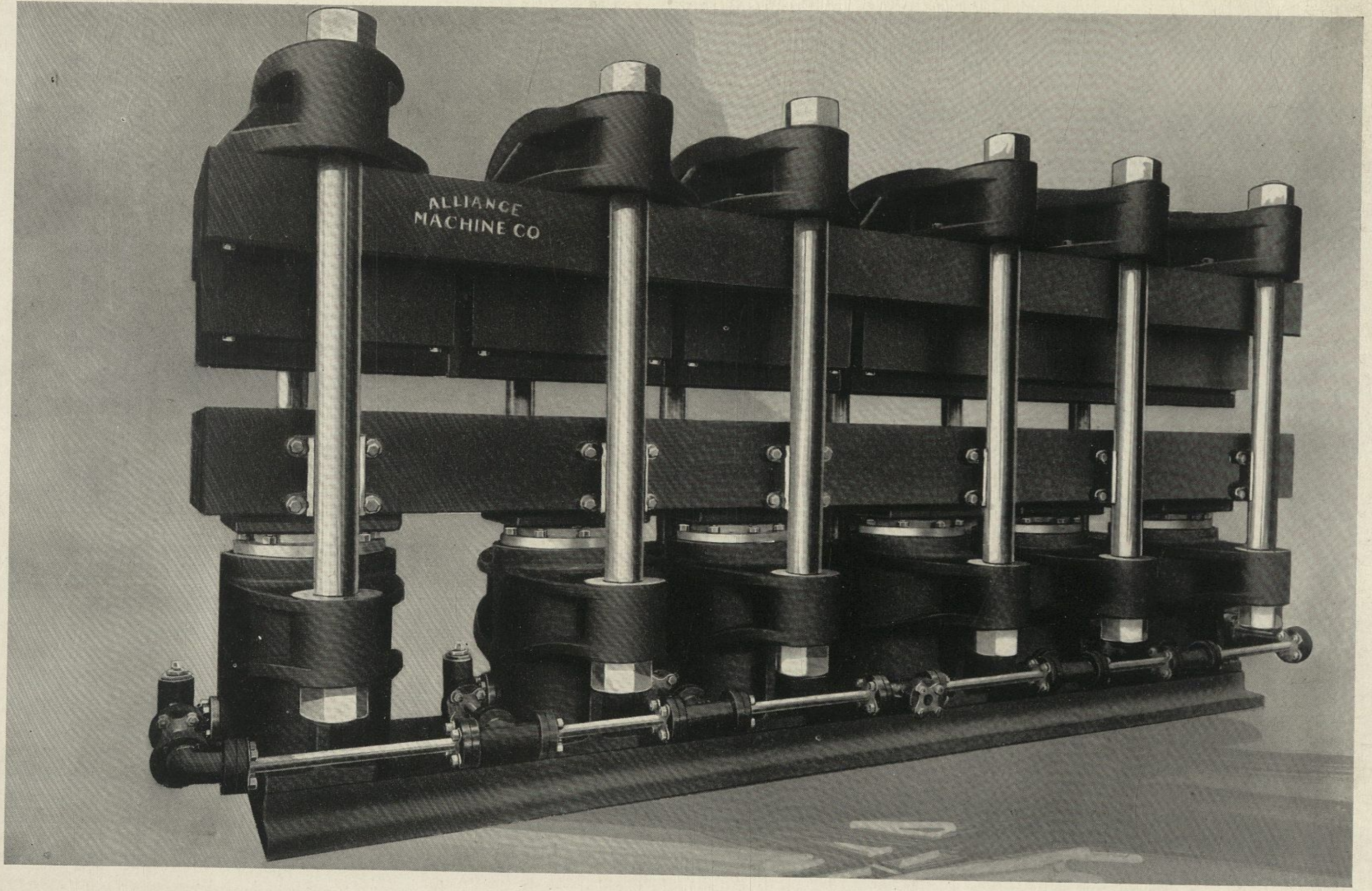
This shear is of the duplex type and is arranged to cut two 4 x 4-inch billets. Built for any size billet. Furnished with or without steam intensifier.


THE ALLIANCE MACHINE COMPANY

Motor-Driven, Four-Roll, Special Pipe Forming Machine

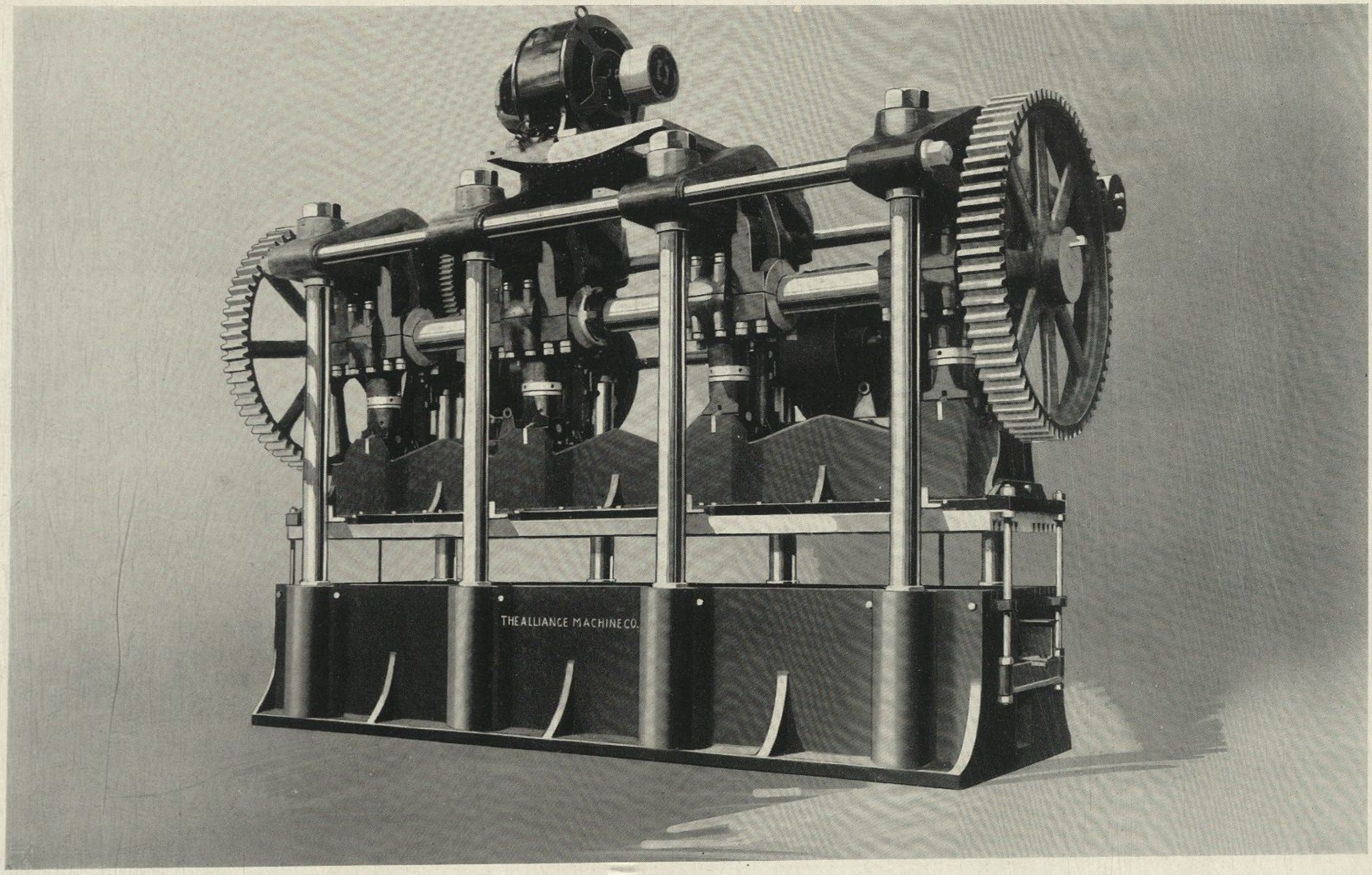

THE ALLIANCE MACHINE CO.

Motor-Driven, Four-Roll, Pipe Forming Machine

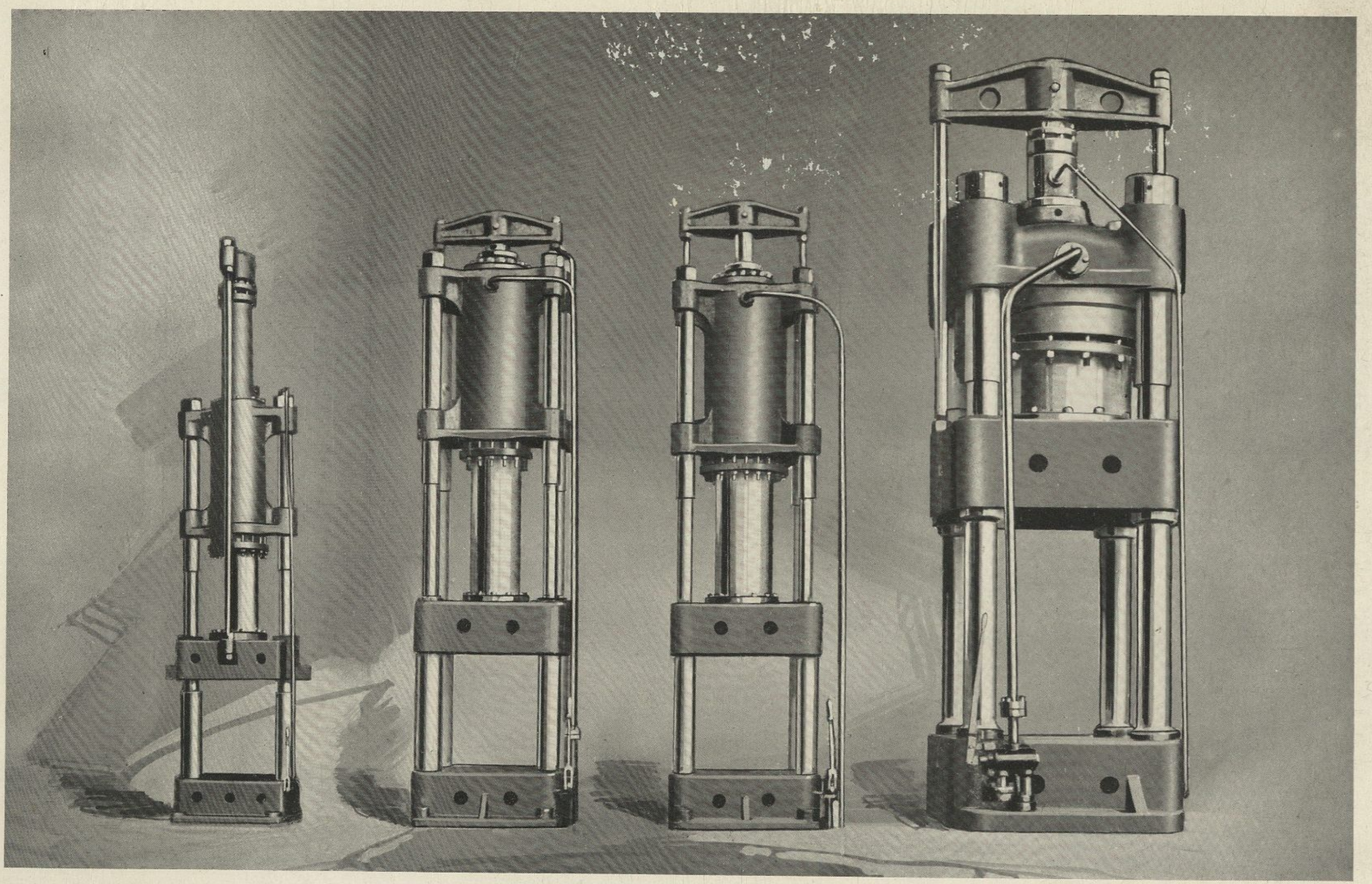


Eight Hundred and Fifty-Ton Six-Cylinder Press, for Flanging Automobile Frames

The machine is so designed that either 2, 4 or 6 of the cylinders can work at one time. Built in any capacity.


THE ALLIANCE MACHINE CO.

Eight Hundred and Fifty-Ton, Motor-Driven, Geared Press
For cutting and forming automobile side frames



Group of Hydraulic Presses—50, 80, 150 and 1000-Ton Pressure

ALBERT L. STRUVEN,
BALTIMORE,
MARYLAND.

THE CORDAY & GROSS COMPANY, CLEVELAND

Heise

ALBERT L. STRUVEN,
BALTIMORE,
MARYLAND.